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ABSTRACT

This report presents an overview of research objectives, sampling approaches, data collection procedures, and instruments and plans for analysis used in assessing the impact of the President's Council on Physical Fitness and Sports on different types of fitness programs. Surveys were conducted of: (1) community fitness programs; (2) employee fitness programs; (3) consumer-initiated public information programs; (4) sponsor-initiated public information (print and television); (5) testing, awards, and other competitive events; (6) the Demonstration Center Schools Program; and (7) state Governor's Councils. For each of these programs and activities, a description is given of data collection techniques, survey instruments, and methods of analyzing collected data. Exhibits are provided of questionnaires sent to involved groups, of interview guides, and of instruments sent to state education agencies and demonstration schools. (JD)

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ED248228

Office of Disease Prevention and Health Promotion

EVALUATION METHODOLOGIES: A STUDY TO EVALUATE THE FUNCTIONING AND IMPACT OF THE PRESIDENT'S COUNCIL ON PHYSICAL FITNESS AND SPORTS

REPORT NO. 3

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SP 025 163

EVALUATION METHODOLOGIES:
A STUDY TO EVALUATE THE FUNCTIONING AND IMPACT OF THE PRESIDENT'S COUNCIL ON PHYSICAL FITNESS AND SPORTS

REPORT NO. 3

Office of Disease Prevention and Health Promotion

Department of Health, Education and Welfare
March 5, 1980

This report is made pursuant to Task 5 of Contract No. 282-78-0183-FS. The names of the persons employed or retained by the contractor, with management or professional responsibility for such work for the content of the report are Robert Bruce, Ph.D., Robert Bozzo, Paul Brounstein, Ph.D., and Frances T. Campos, Ph.D.

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I. INTRODUCTION

This report builds upon the previous Task 5 deliverable products by presenting a further explication and development of methodologies for assessing the PCPFS program clusters developed in Task 2. The previous Task 5 reports presented "Design Concepts for Evaluating Fitness and Capacity Building Programs and Participatory Events" and "Design Concepts for Evaluating Mass Media Programs". The design concepts included a delineation of the stated or inferentially plausible classes of outcomes for each cluster, potential outcome measures and those explanatory variables which could readily be identified. Candidate research questions were then developed along with explanations of the type of research designs which could be used to provide answers in an experimentally sound conceptual framework. Lastly, the Design Concepts Reports included preliminary cost estimates.

Following its review of the reports, HEW selected the program clusters and evaluation design concepts it wishes to have further explicated. Of the ten original clusters and their associated evaluation design concepts, seven were chosen for further development and subsequent implementation. In some instances, where the Design Concepts reports presented

alternative methodologies or options regarding the level of detail at which a cluster could be evaluated, HEW made design choices within program clusters. Technical questions, clarifications and requested modifications in the suggested designs were dealt with in memoranda to the Project Officer.

For each of the program clusters and design concepts chosen for development, this report presents an overview of the research objectives, and an explanation of sampling approaches, data collection procedures, instruments and plans for analysis.

II. COMMUNITY FITNESS PROGRAMS

INTRODUCTION

Identified community fitness programs fall into one of two categories -- those which make facilities available to the community at large (e.g., J.C. Penney's exercise trails) and those with staff to provide a more aggressive, structured and programmatic approach toward changing the exercise/fitness related behavior, often of a specified target audience (e.g., D.C. Youth Fitness, Model Adult Fitness Programs in Los Angeles). Community fitness programs are locally based, usually easily accessible, sponsored by private industry and/or local government and are open to all those who would use them.

Three waves of activity are necessary to determine the accessibility and content of such programs, and to make an initial assessment of program effects. Initially, a program development/description will be designed and then mailed to a number of agencies sponsoring community fitness programs. The goal of the survey is to allow a more in-depth examination and limited cross-sectional comparison of the structure, content and usage patterns evidenced in the local fitness programs. A copy of the draft survey instrument is incorporated in this report.

Once the survey instrument has been analyzed, a small subset of community fitness programs, which accurately reflect the actual variation of programs, will be selected for follow-up study. Subsequent analyses, in the third wave of activity, shall focus on the program-participant relationship and the effects of program participation on fitness/health related behaviors as a function of the participants' level of usage. The following discussion will detail each of the activities required for satisfactory completion of the community fitness program assessment.

PHASE I: INITIAL PROGRAM ASSESSMENT

Phase one activity is directed towards an assessment of community fitness program types and content. This initial assessment will be accomplished by selection and mail survey of a large sample of programs and program sponsors. The survey instrument is designed to address basic research questions regarding:

- Program Description
- Participant Description
- Program-participant relationship, that is, are different program types differentially effective as a function of participant characteristics.

As already noted, identified community fitness programs fall into one of two categories -- structured programs and facilities only programs. In order to maximize economy without endangering the integrity of the obtained data, a sample of each program type will be selected initially for assessment.

Sampling Frame Development and Sample Selection

Approximately 2200 community fitness programs have been identified. These programs are distributed as follows:

- 440 exercise trails

  - 367 sponsored by the J.C. Penney Co., Inc.
  - 73 sponsored by other concerns (e.g., U.S. Air Force, local governments)

  A listing of these specific programs has been provided by J.C. Penney and the PCPFS.

- About 1800 local parks and recreation programs

  A listing of these specific programs was provided by the National Recreation and Parks Association.

- 6 known structured community fitness programs.

  A listing of these programs has been provided by the staff of the PCPFS.

Initial assessments will be directed primarily towards obtaining descriptive information. For this purpose it may be determined that a maximum sample size of 384 observations would be required to assure that derived estimates reach conventional levels of reliability and precision. However, stratification of programs according to "type", yield more homogeneous program clusters from which to sample. Increased homogeneity results in better interval estimates of actual population parameters from smaller samples than would otherwise be required.

Stratification should occur along variables hypothetically relevant to differential program type performance, or impact. For purposes of sampling in the present effort, some of the following hypothetically relevant stratification variables would be employed:

- Program type

  - Structured, facilities only

- Community size

  - Three levels

- Census region

- Sponsor/level of control
  - Private; local, state or federal government; community or citizen's group.

It should be noted that a sampling matrix derived from the above selection dimensions will have several empty cells. For example, there are only six identified structured programs, only one of which is located outside the Middle Atlantic States -- Census Regions 1 and 2. This does not really pose a threat to the validity of the sample; again, the purpose of this initial assessment is to obtain descriptive information and not to formulate or to evaluate the adequacy of inferential or causal relationships. It is proposed that a sample size of approximately 250 community fitness programs be selected for initial observations. The breakdown of the sample is described in the following paragraphs.

Six identified structured programs. Because the population of such programs is so small, a 100 percent sample is required.

About one hundred known exercise trails programs. The number of selected programs of this type reflects roughly the proportion of these programs relative to the total number of programs in the sampling frame. Though little variation is expected within facilities only programs sponsored primarily by either private or other concerns, larger differences may exist between such programs as a function of sponsor type. Therefore, a slight oversampling of these programs is advocated. Though facilities only programs represent about 20 percent of the total programs, it is recommended that these programs constitute about 40 percent of our sample. This procedure will yield a sample

size large enough that assessments will be sufficiently sensitive to pick-up subtle differences in program development, implementation and later impact as a function of sponsor initiation and "community" usage patterns.

Of these roughly 100 programs, it is suggested that about 60 be selected from privately sponsored programs and about 40 from those programs not sponsored primarily by the private sector. Selecting 40 of the 73 known "other initiated" exercise trails programs constitutes a deliberate oversampling. The rationale is that little variation is expected to occur within privately sponsored packaged programs, hence a relatively small sample should yield adequate estimates of population parameters. However, "other sponsored" programs, though they employ the same program package may differ significantly from privately sponsored programs in that they may:

- Serve specific interest groups with uniform needs and usage patterns (e.g., U.S. Air Force sponsored programs may be used for a prescribed training routine)
- May be one of many facilities within a much larger fitness program
- May serve as the basis for a more "structured" program.

Approximately 145 recreation and parks departments. At this point, it is not known to what extent randomly selected parks and recreation departments sponsor fitness programs or provide fitness facilities. However, in view of the small number of structured fitness structured programs known to the PCPFS staff,

it is anticipated that most such programs will fall into the facilities only category. A sample of this size should allow for the detection of program variation when and where it exists.

The figures given represent the number of completed surveys that are desired. Assuming a relatively high response rate (70 percent) approximately 360 mailings would be required to obtain the 250 completed surveys. These mailings would be made so that the proportion of "program type" required by the sample for analysis would be obtained.

Data Collection Procedures

Persons responsible for the community fitness programs in the selected sample will receive a mail questionnaire and cover letter. This letter should be printed on HEW stationery and should explain briefly the survey's purpose and request respondent participation.

As completed surveys are returned, respondents will be noted and records of their identities destroyed. Approximately two weeks to one month after the original mailing has been made, non-respondents will be contacted again by mail. A note reminding them of the survey's purpose and importance will be enclosed in this mailing. An additional survey instrument will also be included so that respondents having "lost" the initial survey will now be able to respond promptly. Those not responding two weeks later will b contacted and asked to complete the survey. It is expected that direct telephone contact will be effective in attaining the required response rate.

Survey Instrument

A copy of the draft survey instrument is included in Exhibit II-1 The instrument is roughly divided into two sections each with four-five subsections. An overview of the instrument follows:

- Program Description
  - Sponsor
    - Sponsor identification description
    - Motivation for sponsoring program
    - Barriers to and facilitators for initiating program
    - Initiation process
  - Program Goals
    - How does program allow or try to effect change
    - What changes are desired and for what audience
  - Facilities
    - Type
    - Number
    - Condition
    - Accessibility
  - Program and Personnel
    - Nature, number and type of programs over and above presence of facilities
    - Number, qualifications and involvement of persons running programs
    - Relationship of programs when and where they exist with other local, regional or national programs
    - Organizational and communication patterns
  - Outreach activities
    - Public or Special Events
    - Promotional activities
- Participant Description

EXHIBIT II-1

COMMUNITY FITNESS SPONSOR QUESTIONNAIRE-

Dear Recreation Director:

The Department of Health, Education and Welfare's Office of Disease Prevention and Health Promotion wishes to learn more about the scope and content of physical fitness programs at the community level. You are requested to complete this questionnaire and return it to The Granville Corporation, the firm under contract to perform the survey.

The questionnaire may ask for information which is not applicable to your department's programs or information which is not readily available. In such cases, indicate NA or NI respectively. If there is information not specifically requested, but which you believe would be appropriate to the survey, please write it on the back of the questionnaire or attach it.

All survey information will be aggregated statistically; the name of your organization will not be used in any of the analyses or reporting of the survey results. No information identifying your organization will be seen by anyone outside the staff of The Granville Corporation.

1. Which of the following health/fitness facilities exist in your community? At large, at no charge or at nominal fee? Indicate only those facilities open to the public. Next to each appropriate response indicate the number of such facilities in your community.

___Par Courses/Exercise Trails
___Hiking Trails
___Bicycle Paths
___Swimming Pool (Outdoor)
___Swimming Pool (Indoor)
___Jogging/Walking Paths
___Gymnasium (Place a check mark next to each apparatus in gymnasium)
  ___Trampoline
  ___High Bar
  ___Parallel Bars and/or Uneven Parallel Bars
  ___Rings
  ___Climbing Ropes
  ___Side-horse and/or Vaulting Box
  ___Balance Beam
  ___Floor Space and Mats for Tumbling and Floor Exercises
  ___Weights/Weight Room
  ___Progressive Resistance Equipment
  ___Other (EXPLAIN)_____
  _____
  _____

2. Which of the following health/fitness programs exist in your community? Next to each appropriate response indicate the number of such programs in your community. (Indicate only those facilities open to the public at no charge or with a nominal fee.)

___Jogging/Walking
___Swimming/Aqua Dynamics Instruction
___Calisthenics
___Gymnastics
___Dance (Includes "Aerobic Dancing")
___Weight Training (Including Progressive Resistance Programs, Isometric and Isotonic Exercises, Instruction).
___Other (SPECIFY)_____
_____
_____

NOTE: The following questions will pertain only to those programs or facilities for which you or your department has a primary supervisory or overseeing function.

3. What were the reasons for the initiation of each program? Please indicate the name of the specific programs at the top of the table below. For each program provided indicate, in order of importance (1 = most important, 7 is least important) the reasons the program was initiated in your community.

REASONS FOR INITIATION	Name of Program (Please enter one program or facility name at the top of each column)					
Community requests						
Departmental or personal concerns or interests						
Local government policy/ regulations						
State government encouragement						
Federal government encouragement						
Private industry contributions or support						
Other (SPECIFY)						

4. Did you or your department seek assistance in initiating these programs? ____Yes ____No

For each program in which assistance was requested and/or received, specify program, type of assistance and provider of assistance.

PROGRAM NAME	TYPE OF ASSISTANCE ($ Amount if Applicable)		PROVIDER
_____	_____	$ ___	_____
_____	_____	$ ___	_____
_____	_____	$ ___	_____
_____	_____	$ ___	_____

5. For each program listed in Question 3, identify the various program aims. Also, identify the target audience, if any, to which these programs are directed.

PROGRAM NAME	AIMS	AUDIENCE
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

6. Please indicate below any program changes that would be desirable in order to better enable the program aims to be accomplished in meeting the needs of the audiences specified in Question 5.

PROGRAM NAME	CHANGES
_____	_____
_____	_____
_____	_____
_____	_____

7. Are the facilities listed in Question 3 open year round? Answer yes or no for each facility.

FACILITY	OPEN?
_____	____
_____	____
_____	____
_____	____
_____	____
_____	____
_____	____
_____	____
_____	____

For each facility that is not open year round, describe the annual schedule of operation.

FACILITY	SCHEDULE
_____	____
_____	____
_____	____
_____	____
_____	____
_____	____
_____	____
_____	____
_____	____

8. For each facility, list the hours of operation.

FACILITY	HOURS OF OPERATION
_____	____

FACILITY	HOURS OF OPERATION
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

9. In general, are these facilities easily accessible? (CHECK ONE)

____Good public transportation and public parking
____Good public transportation only
____Some public transportation and public parking only
____Some public transportation only
____Public parking

10. For each of the programs directed and/or sponsored by your department, please complete the following table.

STAFFING AND COSTS	PROGRAM NAME						
Number of program staff (Total)							
Part-time staff							
Full-time staff							
Program staff reporting responsibility To whom About what How often							
Program administrative costs per annum: a) Salaries b) Other costs							

11. For each program sponsored or supervised by your department, describe the enrollment schedule and pattern. Check the enrollment pattern that best describes each program entered at the top.

	Program Name					
Year-round open enrollment						
Year-round enrollment limited to specific number of groups/ persons						
Periodic open enrollment						
Periodic open enrollment limited to specific number of groups						
Enrollment of specific duration						
Enrollment of indefinite duration						

12. If participant records are kept, do they include in-take and/or progress reports? And what information regarding participant expectations, goals and performance is recorded?

PROGRAM NAME	IN-TAKE SUPERVISION		PROGRESS REPORTS		HOW OFTEN	CONTENT
_____	___Yes	___No	___Yes	No	_____	_____
_____	___Yes	___No	___Yes	No	_____	_____
_____	___Yes	___No	___Yes	No	_____	_____
_____	___Yes	___No	___Yes	No	_____	_____
_____	___Yes	___No	___Yes	No	_____	_____

13. Below, indicate, to the best of your knowledge, the approximate number of persons that use each program or facility per/month.

FACILITY OR PROGRAM NAME	NUMBER OF PERSONS PER MONTH

14. To the best of your knowledge, what percent of participants or users of each program or facility are . . .

PARTICIPANT CHARACTERISTICS	PROGRAM OR FACILITY NAME				
Male					
Female					
Black					
White					
Hispanic					
Other					
10-30 Years Old					
31-50 Years Old					
Over 50 Years Old					
Occasional Users (Once or twice a week)					
Moderate Users (Three or four times weekly)					
Extensive Users (More than four times weekly)					

15. If you have compiled data or participant records regarding reduction in CV risk, weight change, change in muscle tones, exercise regimen, etc. and/or other health/fitness related dimensions, please describe the nature and extent of these data.

If possible, would you please forward any reports or aggregated data to us to help us better understand your program?

Thank you for your cooperation.

- Demographic characteristics
  - Breakdown by sex, age and race

- Usage patterns

It is expected that the quality of information obtained from the participant description section of the survey will vary widely. Information obtained from the structured programs should be relatively accurate, especially in regards to information concerning participant characteristics and usage patterns. If there have been formal or information communication between program personnel and participants, information regarding personal expectations and outcomes may be derived. Where local departments of parks and recreation have an attendant or program coordinator reasonable estimates of participant characteristics and usage patterns may be obtained. The participant description section of the survey may yield little, if any, usable information for some facilities-only programs. Also, many of the parks and recreation departments from the NRPA list may not have fitness facilities or fitness programs and may, therefore, be eliminated from further analyses. However, in instances where information does exist, it is essential that every effort be made to assure accurate assessment. Data derived in this first phase of the research will be important in its own right in determining the extensiveness and content of community fitness programs. These data will also provide a base from which to structure the detailed program examinations and comparisons required for the subsequent phases of the investigation.

Data Analysis

Data will be coded, edited and then entered into a computer file. Initial data analyses will generate cross tabulations by "program type," i.e., location on dimensions used for initial stratification. Subsequent analyses may employ multiple regression techniques in an attempt to determine the consistency and extent of differences between "program types." These analyses serve as a bridge to those to be performed in the second wave of activity in this research.

PHASE II: PROGRAM SELECTION

The objective of Phase two activity is to determine exactly how community fitness programs differ. Analysis of data collected in Phase I will illuminate the dimensions along which programs differ, thereby facilitating the specification of program type. This identification process will be extremely important in the selection of a subsample of community fitness programs to be investigated in further detail in Phase III; these subsequent analyses will deal directly with issues concerning the effects of program type and participant characteristics on program impact.

Assessment of the extent to which community fitness programs have affected individual fitness behaviors requires that information is obtained from participants or from the program's records of participants' performance and satisfaction. Because it is not practical to sample participants from each of the programs already surveyed, a subsample of programs and their participants will be selected and surveyed in Phase III.

Analyses of data derived from the initial survey will help to finalize selection dimensions so that a smaller sample of programs which reflect accurately the scope and nature of community fitness programs may be derived. Though selection dimensions were employed in the first stage of the research, they were arbitrary and though they, a priori, seem to reflect differences between programs, they may not. Analyses of the obtained survey data will allow a check on the validity of these selection dimensions, as well as the uncovering of other important indicators of program variation, heretofore unidentified. In addition to regression analyses, (assuming a suitable number of returned completed surveys) data derived from the initial survey will be subjected to principle component or factor analyses. The results of these analyses will yield programs grouped by "type"; the variables that cluster together to differentiate program type shall comprise the set of final selection dimensions. A sampling matrix will be constructed using these selection dimensions; programs will be placed in this matrix and selected for further assessment.

The sample size required for the assessment of the program-participant interaction/program impact cannot be specified at this time. The size of the sample of programs selected will depend largely on actual program diversity. In the simplest case where only two types of programs emerge -- facilities only and structured programs -- a sample size of sixteen -- thirty programs selected for follow-up investigation should suffice.

To the extent that a wider diversity of programs exist, further stratification would be required. However, even with a relatively complex sampling matrix it is extremely unlikely that more than thirty programs would have to be sampled in order to

generate reliable information. A great number of program stratifiers will produce greater homogeniety of elements so that fewer observations of each type are required to yield quality information.

Each of the six identified structured programs should be included in the sample. Should the Phase I survey reveal additional structured programs, it will be desirable to purposively insert a few of them into the sample. The number and types of structured programs to be included will be decided jointly with the HEW Project Officer following Phase II analysis. Until the survey data are available, we will adhere to the assumption made in the Design Concepts Report that structured programs are few and that the total number selected for follow-up assessment will be about ten.

PHASE III: PARTICIPANT GROUP COMPARISONS

Phase III is directed towards obtaining information which responds specifically to concerns regarding the differential impact of community fitness programs as a joint function of program type and participant characteristics. Answers to the research questions detailed in the Task 5 Design Concepts Report, e.g., "Is there differential impact between private (business) or public (local government) sponsorship? Between health (BCBS) and non-health related (J.C. Penney) sponsorship? or Does usage and/or fitness increase as a function of program type or participant usage patterns?, require collection of data directly from program participants.

Data will be collected from persons participating in a subsample of community fitness programs, as well as from some persons not participating in these programs. Individuals will be surveyed twice; the first assessment will occur during an initial site visit in which interviewers will also perform a "case study"

of the community fitness program. The second assessment will occur approximately 6 months after the first survey. The design of this study, a repeated post measure, stratified participant-control group design combines two design options discussed in the first report submitted pursuant to Task 5. In addition, subsequent analyses of these same data will permit a cross-sectional program comparison. The details of Phase III activities follow.

Plans for selecting individual subjects for the stratified participant study must be carefully mapped out. The Design Concepts Report proposed a comparison of participants and non-participants. The decision whether to obtain non-participants from the community where the fitness program or facility is located or from an off-site location involves a choice between opposing rationales. In favor of off-site non-participants is the fact that these persons do not have the opportunity to use the on-site fitness program or facilities, whereas on-site non-participants for design purposes can be considered to have made a choice not to use the available programs. Such a choice may reflect attitudes which themselves are the determinants of fitness behavior, thus rendering them non-equivalent as a control group. Using persons off-site as a control group would thus enable us to better infer that the presence or absence of the program or facility is responsible for differences in fitness behavior. To ensure that possible regional variations in prevailing attitudes are taken into account, the control groups could be selected in communities relatively close to the sample

program sites, say a half an hour's drive away. These communities will be accessible for the field staff, but far enough away that the residents do not have ready access to the programs being assessed.

The argument for using on-site non-participants is that these persons, being drawn from the same community as the participants, would be equivalent to them. This equivalence would include equal access by the two groups to the fitness programs or facilities. Leaving aside the question of possible differences in their motivation for engaging in fitness activities, the fact that the non-participants had not availed themselves of the program or facility being studied would be the only factor differentiating them from the participants. Thus, this rationale would attribute differences in fitness behavior to the community fitness program or facility. Based on the initial comments of HEW technical reviewers, Granville will opt for the latter approach. An additional point is that control groups need not be selected for all 20 or 30 programs being examined. We suggest selection of control group members at 4 sites, one in each Census Region; each control subgroup should be comprised of approximately 30-50 persons.

For selection of the participants, we envision initial assessment of 30 persons per site. Respondents will be divided in a post hoc manner to determine their level of program utilization high, medium or low; one-half of each usage group will be assessed in a second post measurement four to six months later.

An additional 15 participants, not measured on the first post measure will also be assessed on the participant survey instrument at this time. This will allow "control" over the possible effects due to the reactivity of testing, maturation or their interaction. The same strategy will be used for the control groups. The anticipated quasi-experimental design can be diagrammed as follows:*

Post Measure	PM_2
P_{1A}	P_{2A}
P_{1A}	P_{2B}
C_{1A}	C_{2A}
C_{1A}	C_{2B}

The procedures for contacting the participants will vary between structured programs and facilities-only sites. In the former case, participants will probably be identifiable from program records and can be contacted by telephone or in person at the program site. In the latter case, participants will have to be encountered incidentally as they are observed using the facilities. In both cases, once contact has been established and

*Where numbers indicate time of measure and letters indicate main group to which sub-groups belong.

cooperation obtained, the field staff will administer the questionnaire and fitness measures. Control group respondents will also be encountered incidentally on an nth person basis as they are found in a public place such as a park. These techniques should provide a diverse sample of participants without any of the inherent drawbacks of quota sampling.

Data Collection

As discussed above, each of the selected programs shall be visited by Granville staff persons. Teams of two people will visit each selected community fitness program. Both team members will interview program organizers, participants and other key actors. When and where possible they will also access program records and transcribe information germane to the issues of program function and impact. In addition, team members will recruit participants to complete an assessment tool designed to obtain all relevant information regarding program usage, personal goals, expectations, perceived present outcomes, and behavioral intent and personal expectations relating to future health and and fitness behaviors.

It is anticipated that team members will be on site for 3 days. During this time, if it is possible to obtain data from more than thirty participants, every effort to do so should be made.

Survey Instrument

A copy of the draft participant survey instrument is included in Exhibit II-2. The instrument is similar to that used in the first assessment phase of this study. However, the

EXHIBIT II-2

COMMUNITY FITNESS PARTICIPANT QUESTIONNAIRE

Dear Participant:

The Department of Health, Education and Welfare's Office of Disease Prevention and Health Promotion wishes to learn more about the scope, nature and effects of physical fitness programs at the community level. This survey is being conducted at a number of community facilities across the country. You are therefore requested to complete this questionnaire which is being administered by a member of The Granville Corporation, the firm under contract to perform the survey.

The questionnaire may ask for information not applicable to you or which you do not have. In all such cases, simply indicate "not applicable" or "don't know".

All survey information will be aggregated statistically; neither your name nor any personal identifying information will be used in any of the analysis or reporting of the survey results. No information identifying you will be seen by anyone outside the staff of The Granville Corporation.

EXHIBIT II-2
(Continued)

1. Sex (check one)

   Male _____
   Female _____

2. Age (fill in your age) _____ Years

3. Race/Ethnic background (Check appropriate, optional)

   _____ Black
   _____ White
   _____ Hispanic
   _____ Oriental
   _____ American Indian
   _____ Other

4. Occupation _____ (Fill in primary occupation)

5. Marital Status _____ Married _____ Single (check one)

6. Height _____ ____ (Record your height in feet & inches)

7. Weight _____ (Record your present weight in pounds)

7a. Considering your height and frame which of the following items best describes your weight? (Please check one)

   ___more than 10% underweight
   ___5-10% underweight
   ___within 5% (either over or under) of desirable weight
   ___5-10% overweight
   ___10-20% overweight
   ___20-30% overweight
   ___more than 30% overweight

8. Highest educational grade level completed _____.
   (Please fill in the blank)

9. Have you had any of the following illnesses or conditions?

   _____ Heart disease
   _____ Arterial sclerosis
   _____ Atherosclerosis
   _____ Angina pectoris
   _____ Obesity (due to hypothyroid or other cause)
   _____ Tuberculosis

EXHIBIT II-2
(Continued)

_____ Arthritis
_____ Anemia
_____ Cancer
_____ Chronic high blood pressure
_____ Acute high blood pressure
_____ Other chronic respiratory illnesses (e.g.asthma emphysema)
_____ Migraine headaches
_____ General malaise
_____ Ulcers
_____ Other serious illness (specify)
_____

10. On the average, how many total hours do you sleep each day (day here is used to refer to a 24 hour period)? (Please check one)

_____ 6 hours or less
_____ 7 hours
_____ 8 hours
_____ 9 hours or more

11. Overall, how often do you eat breakfast? (Please check one)

_____ Frequently, almost every day
_____ Sometimes
_____ Rarely
_____ Never

a) Overall, how often do you eat between meals? (Please check one)

_____ Never
_____ Rarely
_____ Sometimes
_____ Frequently

12. In general, how often do you consume alcoholic beverages? (Please check one)

_____ Never
_____ 1-2 days per week
_____ 3-4 days per week
_____ 5-6 days per week
_____ 7 days per week

EXHIBIT II-2
(Continued)

a) When you do drink, how many drinks, on the average, would you say you consume? (Please check one)

____ Never drink
____ 1-2 drinks
____ 3-4 drinks
____ 5 or more drinks

13. Do you smoke cigarettes? (Please check one)

____ Never smoked
____ Used to smoke, but don't anymore
____ Presently smoke

a) If you did or presently do smoke, about how many cigarettes did you or do you consume daily?

____ Less than one pack
____ One pack
____ More than one pack

b) Which of the following best describes the way you smoke?

____ Puff lightly though infrequently
____ Puff frequently
____ Inhale shallowly though infrequently
____ Inhale shallowly and frequently
____ Inhale deeply though infrequently
____ Inhale deeply and frequently

c) For how many years have you been a smoker?

____ Less than 10 years
____ 10-19 years
____ More than 20 years

14. Which of the following best describes your present physical condition (check appropriate response)

_____ Poor
_____ Below average
_____ Average
_____ Above average

EXHIBIT II-2
(Continued)

15. How important is it to you to be physically fit? (Check as appropriate?

_____ Not at all
_____ Somewhat
_____ Moderately
_____ Extremely

16. Here is a list of active things that people do in their free time. In general, how often do you do these things? (Please check appropriate column item for each activity listed in the rows)

	Often	Sometimes	Never
Active sports			
Swimming or taking long walks			
Working in the garden			
Doing physical exercise			
Taking weekend automobile trips			
Hunting or fishing			

17. On the average how often do you exercise and/or participate in physical strenuous activities for a continuous period of at least 15 minutes (Check as appropriate)

_____ Every day.
_____ 4-6 days a week
_____ 2-3 days a week
_____ Once a week
_____ Less than once a week

18. Please rate the following reasons why you exercise in terms of its importance to you (use 1=most important 2= 2nd most important ..... etc.)

_____ Personal satisfaction
_____ Meet new people
_____ Enjoy the company of others

EXHIBIT II-2
(Continued)

_____ Weight reduction
_____ Body building
_____ Increase endurance/stamina
_____ Decrease threat of chronic, respiratory or circulatory disease.
_____ Reduce stress
_____ Develop or improve coordination and sport skills
_____ Other (Specify)

19. Which of the following and how many health/fitness facilities and programs do you know of in your community. Indicate only those facilities & programs which are open to the general public for a nominal fee or no charge facilities (place # of sites next to facility or program name)

_____ Par Courses/ Exercise Trails
_____ Hiking Trails
_____ Bicycle Paths
_____ Swimming Pools
_____ Jogging/Walking Paths or Programs
_____ Gymnasiums

Programs: (Organized, supervised usually including instructions)

_____ Jogging/ Walking
_____ Swimming/ aqua dynamics
_____ Calisthenics
_____ Gymnastics
_____ Dance (including aerobic dancing)
_____ Weight Training (including progressive resistance, isometric & isotonic exercise instruction)
_____ Other (Specify) _____
_____

20. Please indicate, in table form in which of the above facilities/programs you participate. Also indicate for each when you began using the facility, the frequency, duration and any cost of participation & how you learned about the existence of the program or facility.

EXHIBIT II-2
(Continued)

Name & type of facility or program (Pl.fill in)	Period of present use	Frequency	Average duration	Cost	How learned about program
Example: Swimming	2 years 1977-present	3 times/ week	1/2 hour	75¢/ use	Newspaper article

21. What programs and facilities not present in your community would you use if available? Please list.

_____
_____
_____

22. Do you foresee your use or participation in the above facilities/programs increasing, decreasing or remaining the same in the next 6 months? Fill in the table:

)

EXHIBIT II-2
(Continued)

Name of facility or program (please fill in)	Use will increase dramatic-ally	Use will increase some	Use will remain the same	Use will decrease some	Use will decrease dramatic-ally

23. In the last year or since you have begun participating in the above programs, please indicate which of the following changes you have experienced (Check all that apply)

a) When you first began program participation were you

_____ Extremely overweight
_____ Somewhat overweight
_____ About normal weight for my size
_____ Somewhat underweight
_____ Extremely underweight

Weight change: gained _____ lost _____ less than 5 lbs.
gained _____ lost _____ 5-10 lbs.
gained _____ lost _____ 10-25 lbs.
gained _____ lost _____ More than 25 lbs.

b) Frequency of illness (common colds, flus, etc.)

_____ Fewer days sick
_____ No change
_____ More days sick

EXHIBIT II-2
(Continued)

c) Cigarette smoking

_____ Increased dramatically
_____ Increased slightly
_____ No change
_____ Decreased slightly
_____ Decreased dramatically

d) Endurance

_____ Increased significantly
_____ Increased slightly
_____ No change
_____ Decreased slightly
_____ Decreased significantly

e) Coordination and sport skills

_____ Increased significantly
_____ Increased slightly
_____ No change
_____ Decreased slightly
_____ Decreased significantly

f) Overall Physical Fitness

_____ Improved significantly
_____ Somewhat improved
_____ No change
_____ Slightly deteriorated
_____ Deteriorated significantly

24. Other than those facilities or programs in your community that you use, what other type of physical or health related activities do you engage in? Please list them and describe the frequency, duration and fees for use. Your answer should include sports activities, health spas, clubs, etc.

EXHIBIT II-2
(Continued)

INTERVIEWER RECORDED DATA

_____ Pulse rate at rest (At least 15 minutes subsequent to exercise)

_____ Blood pressure$_1$ at rest (15 minutes subsequent to exercise)

_____ Blood pressure$_2$

_____ (If blood pressure 1 and 2 are disparate take blood pressure 3)

_____ Skin fatfold

NOTE: Repeated blood pressure measurements should be taken at 10 minute intervals.

I have given my informed consent regarding participation in this survey sponsored by EEW.

_____
Print Name

_____

_____

_____
ADDRESS

_____
Signature

I would be willing to be contacted at a future time to participate in a follow up survey.

_____
Initials

questions are phrased so as to be more appropriate to be asked of participants, whereas, in the initial assessment tool, questions were directed more towards program managers. Also, more detailed information regarding the description of personal characteristics, usage patterns, goals, expectations and perceived outcomes, is required in the participant instrument.

In addition to the participant survey instrument, guided discussions with key program actors shall be used to obtain a more in-depth understanding of program goals and function. The results of these interviews will constitute the bulk of the casebook reports. Additional information, important for the completion of the casebook analyses, will be obtained from program records, when and where they exist and are accessible. Records will be valuable sources of information regarding program development, participant satisfaction and program impact.

Data Analysis

Data obtained from the participant survey will be edited, coded and entered into a computer file. As one of the goals of the data analysis is to describe the nature of the program-participant interaction and its effects on program impact, specification of independent (causal) and dependent (impact) variables is required.

Independent variables are those identifiable environmental, program and/or personal characteristics that are hypothetically responsible, at least in part, for observed differences in perceived or actual program impact. Independent variables may

include:

- Type of sponsoring agent
- Type of program -- facilities only, structured
- Level of staff training
- Extent of program outreach activities
- Extent of program organization
- Extent of participant's use
  - temporal span
  - frequency of use
  - duration of each use
- Participant goals and expectations
- Participant characteristics
  - age
  - sex
  - race

The independent variables relating to program "type" were derived in an earlier portion of this research.

Dependent variables are those identifiable environmental, program and/or personal characteristics hypothetically affected by exposure to the various independent variables; they represent indices of program impact. Dependent variables may include:

- Participant satisfaction
- Behavioral change related to health and/or fitness
  - increased personal exercise program
  - better dietary habits
  - weight loss
  - demonstrated decrease in cigarette smoking
  - decreased CV risk
  - increased performance/endurance
  - change in medical profile
  - fewer minor illnesses
  - increased satisfaction with self-image

- Behavioral intent to maintain health/fitness regimen

Though it is possible to label the above indicators as independent and dependent variables, the causal link usually connoted by these labels may not be clearcut. Without control groups or built-in comparison groups, causal linkages remain correlational and the causes of differential impact cannot be inferred. For example, without prior assessment, participant expectations may be classed as either an independent or dependent variable and, therefore, seen as either a cause or effect of program participation.

Fortunately, the data collection process has allowed for the specification of built-in comparison groups and a no-participant control group. This allows for the use of a stratified participant (by level of use), no-participant control group, post only quasi-experimental design; such a design permits mid-level causal inferences to be drawn from the data. To the extent that records exist or that data regarding pre-program fitness behavior and attitudes exist, the strength of the causal inferences would be greatly enhanced. However, it does not appear at this time that sufficient pre-post data will be available in most fitness programs.

Primary data analysis will generate cross tabulations of the dependent measures as a function of participant level of use in conjunction with the other specified independent variables. Examination of these analyses will suggest which other independent variables are important. Univariate and multivariate analyses of variances, covariance and multiple regression techniques will be employed as required to further investigate program impact on

participants' fitness and health related behavior and capabilities. Such analyses will focus on the relative impact of the independent variables on the dependent variables. Also, these analyses will aid in determining whether specific program variables affect specific participant subgroups differentially.

Collection of data from approximately 20-30 program sites will also allow for a cross-sectional program comparison. For purposes of this analysis, program variables will be related to participant outcome variables. Initially, multiple regression analyses will be the tool by which this task is accomplished. Subsequently, principle component or factor analyses will be used to investigate the extant relationships within the entire data set. These analyses should help to illuminate some of the complex interrelationships existing between program variables, participant characteristics and program impact on participant behavior.

III. EMPLOYEE FITNESS PROGRAMS

Employee fitness programs are sponsored primarily by private business firms for the benefit of their employees and families. The general goals of employee fitness programs seems to be to establish facilities and/or structured programs to encourage increased physical fitness and health-related behaviors of the target population for the purposes of increasing productivity and reducing absenteeism and health insurance costs.

A mail survey directed towards obtaining primarily descriptiv data from program sponsors will be undertaken.

This survey will result in a limited cross-sectional comparison of program structure, content and participant usage patterns. The sampling plan, survey instrument, field procedures and data analysis are discussed below. This chapter also presents the design option (initially outlined in the Design Concepts Report) of collecting information from program participants. This option would facilitate a more complete understanding of the impacts of employee fitness programs.

Approximately 750 employee fitness programs have been identified from the AAFDBI. A sample of one-third of these programs will be selected, at random, for survey; a sample size of two-

hundred and fifty programs should allow for the collection of data which is both reliable and from which generalization is possible.

DATA COLLECTION TECHNIQUES

Persons responsible for the implementation and maintenance of selected programs will be mailed Employee Fitness Program Survey Instruments. To insure that 250 surveys are returned the following procedures will be employed:

- In the first mailings, surveys will be sent to approximately 280 programs in an attempt to obtain the requisite number of responses. An initial return rate of approximately 70 percent is anticipated.

- Surveys will be accompanied by letters from HEW and Granville which explain the purpose and impact of the study. These letters will urge respondent cooperation in the completion of the survey instrument.

- Approximately one month subsequent to the initial survey mailing, nonrespondents will again be contacted by mail. They will, at this time, receive a letter reminding them of the importance of their participation. This letter will request their timely response. A copy of the survey instrument will be included in this communication to facilitate recipient response.

- Two weeks subsequent to this second mailing, phone calls will be placed to the remaining nonrespondents. Once again, these individuals will be reminded of the purpose of the research and the important role that they are to play. They will be asked to submit to an on the spot telephone interview. If this is not possible, a verbal commitment, in which persons promise to complete the survey form, shall be sought.

It is believed that adherence to these survey procedures will not only guarantee a high response rate, but will also enhance the completeness and quality of the data obtained.

SURVEY INSTRUMENTS

A copy of the survey instrument is contained in Exhibit III-1.

EXHIBIT III-1

EMPLOYEE FITNESS QUESTIONNAIRE

Dear Fitness Director:

The Department of Health, Education and Welfare's Office of Disease Prevention and Health Promotion wishes to learn more about the scope, nature and effects of physical fitness programs at the worksite. This survey is being conducted among those private sector firms and government agencies which may have taken some steps in the area of employee fitness. You are therefore requested to complete this questionnaire and return it to The Granville Corporation, the firm under contract to perform the survey.

The questionnaire may ask for information which is not applicable to your organization's program or information which is not readily available. In such cases, indicate NA or NI respectively. If there is information not specifically requested, but which you believe would be appropriate to the survey, please write it on the back of the questionnaire or attach it.

For firms with multiple work locations, it should be noted that this questionnaire applies only to fitness programs at your location.

All survey information will be aggregated statistically; the name of your organization will not be used in any of the analysis or reporting of the survey results. No information identifying your organization will be seen by anyone outside the staff of The Granville Corporation.

EXHIBIT III-1
(Continued)

1. Company Name; Address _____

_____

_____

_____

2. Name & title of respondent: _____

_____

3. What type of business is your organization engaged in? (e.g. Insurance, Publisher, automobile manufacturer) _____

4. How many employees does your company have who could participate in the program?

5. Which of the following health/fitness facilities and programs are offered by your company to your employees and/or their families? (Please write the quantity of each item present in facility as appropriate)

Facilities:

_____ Gymnasium
_____ Swimming Pool
_____ Trampoline
_____ High Bar
_____ Parallel Bars (includes uneven parallel bars)
_____ Rings
_____ Ropes
_____ Side-horse (includes vaulting box)
_____ Balance beams
_____ Floor space & mats for tumbling & floor exercises
_____ Weights/weight room
_____ Progressive resistance equipment
_____ Sauna or Steam-room
_____ Whirlpool/Jacuzi
_____ Par Courses/Exercise Trails/Track
_____ Bicycle Path
_____ Hiking Trails
_____ Other (Specify)

EXHIBIT III-1
(Continued)

6. Describe each structured program you offer or facility you make available for employee use on the following dimensions. An example will be presented to demonstrate an appropriate response. Where staff, sponsor, etc., are the same across programs, please enter "SAME" in table.

Name of program or facility (please fill in)

Sponsored by Department in company	Track					
	Health					
Initiated ___ years ago.	1/2					
Total number of staff running program	3					
Full time Part time	1 2					
Staff Educational requirement	B.A. Phys.Ed.					
Total cost of program funding/ Yr. Salaries Other costs	2000 1600 400					

7. Please rank in order of importance the three most important reasons for initiating these programs (1= most important)

_____ Employee requests
_____ Union/contract requirements
_____ Employer committment to job enrichment
_____ Attempts by employer to enhance employee fitness/health
_____ Increase employee personal satisfaction/morale
_____ Public or private grants
_____ Improved public image/community relationship.

EXHIBIT III-1
(Continued)

8. Please describe each current program along the following dimensions (a sample response is presented):
(Name of program please fill in)

User Characteristics	Track						
Total number of users/Wk.	100						
Employees	75						
Families	25						
Male	70						
Female	30						
Black	30						
White	60						
Hispanic	8						
Other	2						
10-30 Yrs.old	35						
31-50 Yrs.old	55						
Over 50 Yrs.old	10						
Occasional users (once or twice a week)	30						
Moderate users (3 or 4 times a week)	55						
Heavy users (more than 4 times a week)	15						
Use 3 hrs. or less a week	37						
Use 3.6 hrs. a wk.	41						
Use more than 6 hrs. a week	22						

EXHIBIT III-1
(Continued)

9. Please indicate the rate of the following items prior to health/fitness program inception at your company.

   Yearly turnover (total) _____
   Absenteeism (total days/annum) _____
   Total # sick days claimed by employees/annum _____
   Total # of occurrences in which employees were out for more than three consecutive days _____

10. For each facility program listed in question 6 identify the various program aims. Please identify the target audience, if any, to which these programs are directed, structure of program (general instruction, facilities only or individually tailored programs) condition of facilities (excellent, good, fair,poor), recruitment schedule (open all year enrollment (limited or unlimited) other, and hours of operation (an example is below).

Program Name (Please fill in)

Program Caracteristics	Example: Track		
Aims	Allow persons to build up stamina, decrease CV risk, increase self satisfaction at own pace		
Audience	All employees		
Program structure	Facilities only.		
Condition	Good		
Recruitment Schedule	Open all year		
Enrollment	Unlimited		
Hours of Operation	9-5 Mon.-Fri.		

EXHIBIT III-1
(Continued)

11. What program changes would be desirable in order to better enable the program aims to be accomplished in meeting the needs of the audiences specified above.

Program or Facility	Desired Changes

12. Does your department advertise, promote or officially provide any incentives for participation in health/fitness related programs? Please list.

Program	Promotion technique

EXHIBIT III-1
(Continued)

13. Do you keep participant records?
_____ No. _____ Yes

a) If yes, do they include in-take &/or progress reports and what information regarding participant expectations, goals and performance is recorded? If different programs have different recording functions please record responses by program.

Program Name	In-take information.	Type of information in Intake Records	Progress Report	How Often	Contents
1.	__Yes__No	_____	___Yes__No	_____	_____
2.	__Yes__No	_____	___Yes__No	_____	_____
3.	__Yes__No	_____	___Yes__No	_____	_____

14. If you have compiled data or participant records regarding reduction in CV risk, weight change, change in muscle tone or exercise regimen, please describe the nature and extent of these data. If possible, would you please forward any reports or aggregated data to us to help us better understand your program?

THANK YOU FOR YOUR COOPERATION.

It is the intent of this instrument to assess the diversity of programs and facilities made available to individuals by employers, the types, numbers and proportions of persons using these facilities or taking part in these programs and the perceived effects of participation on fitness and health-related behaviors and outcomes. More specifically, the assessment tool covers the following major categories of inquiry:

- Program Description
  - Type of business, industry or agency sponsor
  - Length of time the program has been in operation
  - Organizational structure of program
  - Funds allocated to program operation
  - Number, qualifications and allocation of staff
  - Motivation for sponsoring program
  - Program initiation process
  - Relationship of employee fitness program to other programs not sponsored
  - Program goals
  - Recordkeeping procedures
  - Type and number/amount of facilities and equipment
  - Condition and accessibility of facilities and equipment
  - Outreach activities including promotional activities and incentives
- Participant Description
  - Number of eligibles
  - Breakdown of participants by employee status, amount of family participation, age, sex, race
  - Usage patterns
  - Communicated expectations or goals of participants
  - Measured outcomes for individual participants, e.g., weight loss, changed dietary and exercise habits, improved CV profiles
  - Measured outcomes across all participants, e.g., rates of absenteeism, turnover, average length of prolonged and short-term illnesses.

Though it is anticipated that much detailed program information will be obtained from this survey, data regarding

individual fitness and health-related participant outcomes will remain largely inaccessible. Such information could be obtained in one of the following three ways listed below in descending order of preference:

- Select a representative subset of employee fitness programs. One stipulation for program selection is that up-to-date records are kept on participant performance. Assess fitness and health-related gains of program participants from records; do case study analysis of each program.

- Select a representative subset of employee fitness programs. Granville would make site visits to these programs, distribute participant questionnaires and conduct a case-study analysis of each program.

- Select a representative subset of employee fitness programs. Distribute participant questionnaires to key program personnel and have them distribute surveys to participants. Completed forms would be mailed to Granville.

This additional data collection effort would facilitate a more complete investigation of program-participant interaction and the effects of that interaction on actual health and/or fitness-related behavior or outcomes. Without this additional analysis, data obtained from the initial survey will only allow assessment of the nature and diversity of employee fitness programs, an analysis of who uses such programs and to what extent they use them.

In presenting these options for exploring employee fitness programs at the participant level, Granville recognizes that they go beyond the study selected by HEW from the Design Concepts Report. The options are outlined at this time, because they represent a different set of approaches for obtaining participant data than was presented in the Design Concepts Report. Of course,

this additional level of investigation would have cost implications which Granville would estimate should HEW wish to pursue it.

DATA ANALYSIS

Obtained data will be edited, coded and entered into a computer file. Initial data analyses will generate cross tabulations. These analyses will show how many programs exhibit specified characteristics, e.g., structured weight loss programs, fully equipped gymnasiums, etc. From these primary analyses multivariate data analytic techniques will be used to identify dimensions or clusters of dimensions/factors along which programs seem to differ. Regression analyses employing these factors as predictors will then be performed to determine to what extent programs differing in "type" have different measurable impacts, e.g., program participation rates, absenteeism from work, worker satisfaction, etc. These data analysis plans are concordant with those previously outlined for use in the limited cross-sectional program comparison in the community fitness program section of this report.

Should HEW pursue the option of collecting participant data, specific hypotheses regarding the effects of usage patterns on program impact, differential program impact on specified subsets of participants, etc., could be investigated via multivariate analytic techniques and/or by employing a form of quasi-experimental design as outlined earlier in the community fitness program chapter of this report (stratified participant, control, post only design).

In general, such analyses which include individual

participant information would be beneficial as a means of understanding the relationship between program and participant variables and their interactive effects on program impact. As noted earlier, such assessment is feasible should HEW decide to follow this avenue of investigation.

IV. CONSUMER INITIATED PUBLIC INFORMATION

One aspect of the PCPFS's public information activities involves the distribution of a series of pamphlets and booklets which are either offered free or sold for a nominal amount. These booklets describe general fitness regimens for youth, adults, and older citizens. Some offer specific training programs in sports such as swimming or running. The materials are considered part of what is termed the consumer initiated public information program, since the consumer typically requests the information through the mail, or at a clinic, or through some organization.

What follows is a proposed program to measure the effectiveness of some of these materials in terms of their impact on the attitudes and actions of the requesting individuals. The research is designed to answer several broad categories of questions:

What caused the consumer to request the material?

How did the consumer hear about the material?

What kind of consumer typically requests such material?

What did the consumer learn from the material?

Did the material influence the consumer's attitudes or behaviors in the area of fitness?

Is the material readable, interesting, and informative?

Is material containing general suggestions or material containing specific programs more effective?

The proposed evaluation would consist primarily of a field study in which the responses of consumers who have requested literature would be compared. Some consumers would be sent material consisting of very specific program recommendations, some would be sent material containing more general recommendations, and some would be sent both types of material. These consumers would make up the various experimental groups and would receive the appropriate materials immediately. A separate control group would experience a slight delay before receiving the materials. All groups, those who had and those who had not received the materials, would then be contacted by mail or telephone and asked a series of demographic, attitudinal, and behavioral questions. The responses of the various groups would be compared to examine the impact of the materials received by the experimental groups as contrasted to the control group.

In addition, the general readability and layout of the material would be assessed by asking a trained researcher to score each piece on several pre-existing rating indices. This would be done to insure rough equality of the experimental messages on non-experimental dimensions.

SAMPLING

Sample Size

A total of ten groups, a control group and an experimental group for each of five types of informational requests, will result in a final sample total of 500 persons. The respondents will be divided equally among the ten groups to facilitate comparisons between experimental and control groups.

Telephone Survey Option. In using a telephone follow-up survey, a phone number will have to be located for each person requesting literature. It is assumed that 20-25% of the requesters will have phone numbers that are unlisted or otherwise unavailable. Another 25-30% of the sample will probably remain unreachable after the standard number of 4 call back attempts. Thus, approximately twice as many consumers' names will need to be collected as will appear in the final sample.

Sampling Procedure

Because the design requires a short delay (7-10 days) before the control group is mailed its literature, samples will have to be collected on an ongoing daily or weekly basis. Sampling will depend upon the rate of requests for the experimental literature, and the length of time the study runs. For example, if 250 requests are received per week, and the study runs for 3 months, every third name would be selected for a sample of 1000 out of the 3000 total requests assuming a telephone follow-up survey. Consumers from this list would be randomly

assigned to the experimental and control groups.

While this procedure samples randomly from inside the frame of those who actually request literature, it is not a random sample of the total population. But one of the assumptions behind the consumer initiated public information portion of the Council's program is that this population already differs from the general population. Therefore, this sampling procedure is appropriate for an experimental test of the impact of literature on those who request it.

DATA COLLECTION PROCEDURES

Design and Rationale

Survey Schedule. Consumers will be surveyed using a modification of the posttest-only control group design (Campbell & Stanley, 1963). The design can be visualized as follows:

	1 week	2 weeks	3 weeks	8 weeks
Experimental Groups	receive literature	first follow-up (Exhibit IV-2)	------	second follow-up (Exhibit IV-1)
Control Group	---------	first control measure (Exhibit IV-1)	receive literature	follow-up (Exhibit IV-2)

Weeks 1 and 2 represent a classic posttest-only design. This design was selected in order to avoid the experimental reactivity associated with a pretest. Nevertheless, it would be relatively simple to recontact the groups 1-2 months after they have received their literature in order to assess the impact of the literature

over a longer time period. This would not require any additional groups or respondents, and would allow computation of pre-post change scores. Obviously, these scores would have to be interpreted with some caution, since no additional control group is involved.

Experimental Groups Design. A total of ten groups--five experimental groups and five (pre-post) control groups--will be employed to assess the effectiveness of two different styles of fitness literature: general and specific. A piece of literature will be selected as general if it offers broad, non-detailed information about appropriate activities and their scheduling. The specific piece of literature, on the other hand, should give detailed descriptions of specific exercises together with a specific exercise schedule. The study will compare the effectiveness of these two approaches to determine whether it is best to offer general suggestions that do not overwhelm the consumer, or to lay out a specific exercise program that tells the consumer exactly what to do. In addition, some consumers will be sent both pieces of literature.

Previous screening suggests that consumers typically make either a specific or a more general request for literature, so type of request will be included as a second factor. Thus the final factorial design is as follows:

Type of Literature Mailed	Type of Request	
	General Request	Specific Request
General Piece	X	N/A
Specific Piece	X	X
Both	X	X

Only 5 of the 6 possible cells will be included, since it would not be appropriate to send general literature in response to a specific request. Depending upon the type of request, consumers will be randomly assigned to the kind of literature they are sent.

Procedure

Subjects would be randomly assigned to one of the literature conditions within the appropriate request group or the control group on a daily or weekly basis depending upon the request rate for the literature.

The experimental groups would be sent the literature immediately, while the control group's literature would be delayed for 7-10 days. Before the control group received the literature, all groups would be contacted by telephone and the questionnaire administered. Data collection would be repeated until a full sample of consumers was attained for each cell of the experimental design. A smaller set of questions would be administered to the control and experimental groups, since the control group would not be asked to recall the messages in the literature. All groups would be asked about their current physical activities, and their

attitudes toward physical fitness, as well as various demographic questions. The experimental groups would be asked specific questions about the experimental literature in terms of recall and attitudinal/behavioral impact.

Eight weeks later, after all groups have had the literature for at least 5 weeks, a second follow-up survey would be completed using a shortened version of the section given the experimental groups in the first follow-up. This would assess the impact of the experimental literature after a longer period of time. The control groups, who by now have received the literature, will be administered the same questionnaire used for the first measure on the experimental groups. In this way, the control groups actually serve a dual purpose; their responses to the initial measure serves as a type of pre-measure for the experimental groups, especially should the results from both the experimental and "control" groups first postmeasures be comparable. Also, similarity of responses between experimental and "control" groups on the first follow-up measure will allow us to view the second follow-up measure, administered to the experimental group as representative of both groups overall.

INSTRUMENTS

Preliminary Evaluation of Experimental Materials

Several indices will be used to assure that the 'general' and 'specific' experimental materials are roughly similar on objective measures of interest, readability, and layout effectiveness.

Readability. In the 1940s Flesch developed a readability formula to insure that material was both interesting and comprehensible. He found, for example, that sentences should be 11 words or less in length, and should have about 26 affixes and 14 references to people every 100 words. Two other readability formulae are also commonly applied: Gunning's "Fog Index" and the Dale-Chall formula (see McKee, 1967 for discussion). These indices are scored by a trained scorer, and are relatively simple and inexpensive to administer.

Lay Out. A number of 'mechanical' attributes also contribute to reader interest including colors, number and size of illustrations, print size and type face, etc. (see Hendon, 1973; Valiente, 1967). These physical characteristics have been ranked in order of their contribution to reader interest (Assael, Kofron, & Burgi, 1967). Each experimental piece will be rated on the important variables.

The experimental literature will be roughly equated on the above measures to insure that differences in effectiveness are not due to idiosyncratic or stylistic differences between messages.

Questions for Both Experimental and Control Groups

A copy of the follow-up instrument is contained in Exhibit IV-1. This questionnaire would be used in the first control group measure and in the follow-up experimental group measure. What follows in the text is a general list of the types of questions that are included in the instrument. In addition to the questions asked of both the experimental and control groups, the experimental groups will be asked specific questions about the pamphlet itself.

EXHIBIT IV-1

LITERATURE EFFECTIVENESS QUESTIONNAIRE FOR CONTROL GROUP PREMEASURE AND EXPERIMENTAL GROUP SECOND FOLLOWUP

1. In the past few weeks, have you requested information on physical fitness or exercise?

   Yes..... 1

   No..... 2 (Terminate)

2. Have you received that information?

   Yes..... 1 (For control group, terminate)

   No..... 2 (For experimental group, terminate)

3. Could you tell me the name of the organization you requested the information from?

   PCPFS..... 1

   Other (Specify) 2

   _____

   _____

4. Thinking back about the past week, have you engaged in physical exercise?

   Yes..... 1

   No..... 2 (For control group thank and terminate)

5. Considering this past week, would you please tell me what types of exercise you have engaged in, where you did these exercises, and about how much time you spent on each exercise.

Type of Exercise	Where	No. Times/ Week	Total Time Spent
Jogging/Running	Track (Indoors/ Outdoors)...1	___	15 mins....1 15-29 mins....2 30-59 mins....3 60-119 mins...4 120-240 mins..5 over 4 hours..6
	Neighborhood...2		

EXHIBIT IV-1
(Continued)

Type of Exercise	Where	No. Times/ Week	Total Time Spent
Calisthenics/ Conditioning Exercises	Gymnasium.....1 At home.....2	____	15 mins....1 15-29 mins....2 30-59 mins....3 60-119 mins...4 120-240 mins..5 over 4 hours..6
Swimming	Public Pool...1 Private Pool..2	____	15 mins....1 15-29 mins....2 30-59 mins....3 60-119 mins...4 120-240 mins..5 over 4 hours..6
Basketball/ Baseball/ Football	Public Field..1 Private Field 2	____	15 mins....1 15-29 mins....2 30-59 mins....3 60-119 mins...4 120-240 mins..5 over 4 hours..6
Skiing/Iceskating	Public Facilities..1 Private Facilities..2	____	15 mins....1 15-29 mins....2 30-59 mins....3 60-119 mins...4 120-240 mins..5 over 4 hours..6
Tennis/ Racquetball	Public Courts 1 Private Courts.....2	____	15 mins....1 15-29 mins....2 30-59 mins....3 60-119 mins...4 120-240 mins..5 over 4 hours..6
Other (Specify)			
_____	_____	____	15 mins....1 15-29 mins....2 30-59 mins....3 60-119 mins...4 120-240 mins..5 over 4 hours..6
_____	_____		

(For control group, thank and terminate)

(For experimental group, continue)

EXHIBIT IV-1
(Continued)

6. During the past week have you read the information sent to you?

   Yes..... 1

   No..... 2 (THANK AND TERMINATE INTERVIEW)

7. What were some of the major points contained in this information? (DO NOT READ RESPONSES, CIRCLE MULTIPLE RESPONSES)

   The PCPFS offers booklets on exercise..... 1

   The PCPFS sponsors seminars and programs on exercise.... 2

   Exercise should be done on a daily basis..... 3

   Exercise should be done for 30-60 minutes each day..... 4

   Other (PROBE AND SPECIFY)_____ 5

   _____ 6

8. Was there any information not contained in the booklet that would have been helpful to you in planning or performing your exercise program?

   Yes..... 1

   No..... 2 (THANK AND TERMINATE INTERVIEW)

9. What does this information concern? (RECORD VERBATIM)

   _____

   _____

   _____

   (THANK AND TERMINATE)

EXHIBIT IV-2

LITERATURE EFFECTIVENESS QUESTIONNAIRE
FOR FIRST FOLLOWUP WITH
EXPERIMENTAL AND CONTROL GROUPS

1a. In the past few weeks, have you requested any information on physical fitness or exercise?

Yes..... 1

No..... 2 (TERMINATE)

1b. Have you received the information?

Yes..... 1

No..... 2

1c. Is the information intended for your own use or is it for someone else?

Own use..... 1 (SKIP TO QUESTION 2)

Someone else 2

1d. What is this person's relationship to you?

_____ (WRITE IN)

1e. Has this person read the information?

Yes..... 1

No..... 2

Don't know... 3

2. Have you read the information? Do you plan to read the information when it arrives?

Yes..... 1

No..... 2

3. On the average, would you say that you engage in regular physical exercise?

Yes..... 1

No..... 2 (SKIP TO QUESTION 5)

EXHIBIT IV-2
(Continued)

4. Thinking about an average week, would you please tell me what you do when you engage in regular physical exercise, where you go to do these exercises, and about how much time you spend on each exercise.

Type of Exercise	Where	No. Times/ Week	Total Time Spent
Jogging/Running...1	Track (Indoor/ Outdoor)....1	____	15 mins.....1 15-29 mins.....2 30-59 mins.....3 60-119 mins....4 120-240 mins...5 over 4 hours...6
	Neighborhood..2		
Calisthenics/ Conditioning Exercise.....2	Gymnasium.....1	____	15 mins.....1 15-29 mins.....2 30-59 mins.....3 60-119 mins....4 120-240 mins...5 over 4 hours...6
	At home.....2		
Swimming.....3	Public Pool...1	____	15 mins.....1 15-29 mins.....2 30-59 mins.....3 60-119 mins....4 120-240 mins...5 over 4 hours...6
	Private Pool..2		
Basketball/ Baseball/ Football.....4	Public Field..1	____	15 mins.....1 15-29 mins.....2 30-59 mins.....3 60-119 mins....4 120-240 mins...5 over 4 hours...6
	Private Field 2		
Skiing/Ice-skating.....5	Public Facility....1	____	15 mins.....1 15-29 mins.....2 30-59 mins.....3 60-119 mins....4 120-240 mins...5 over 4 hours...6
	Private Facility....2		

EXHIBIT IV-2
(Continued)

Type of Exercise	Where	No. Times/ Week	Total Time Spent
Tennis/Racquet-ball.....6	Public Courts 1 Private Courts.....2	____	15 mins.....1 15-29 mins.....2 30-59 mins.....3 60-119 mins....4 120-240 mins...5 over 4 hours...6
Other (SPECIFY)			
_____...7	_____	____	15 mins.....1 15-29 mins.....2 30-59 mins.....3 60-119 mins....4 120-240 mins...5 over 4 hours...6
_____...8	_____	____	15 mins.....1 15-29 mins.....2 30-59 mins.....3 60-119 mins....4 120-240 mins...5 over 4 hours...6
_____...9	_____	____	15 mins.....1 15-29 mins.....2 30-59 mins.....3 60-119 mins....4 120-240 mins...5 over 4 hours...6

5. Is there anything about your health that influences your physical exercise?

   Yes..... 1

   No..... 2 (SKIP TO QUESTION 6)

5a. What is it about your health that affects your exercise?

_____ (WRITE IN)

_____

_____

EXHIBIT IV-2
(Continued)

6. (ASK ONLY IF INFORMATION INTENDED FOR SOMEONE ELSE - SEE QUESTION 1c)

You indicated that the literature was intended for someone else. Could you tell me what kind of exercise this person performs, where it is performed, and about how much time is spent each week?

Type of Exercise	Where	No. Times/ Week	Total Time Spent
Jogging/Running...1	Track (Indoor/ Outdoor)....1	____	15 mins.....1 15-29 mins.....2 30-59 mins.....3
	Neighborhood..2		60-119 mins....4 120-240 mins...5 over 4 hours...6
Calisthenics/ Conditioning Exercises.....2	Gymnasium.....1	____	15 mins.....1 15-29 mins.....2
	At home.....2		30-59 mins.....3 60-119 mins....4 120-240 mins...5 over 4 hours...6
Swimming.....3	Public Pool...1	____	15 mins.....1 15-29 mins.....2
	Private Pool..2		30-59 mins.....3 60-119 mins....4 120-240 mins...5 over 4 hours...6
Basketball/ Baseball/ Football.....4	Public Field..1	____	15 mins.....1 15-29 mins.....2
	Private Field 2		30-59 mins.....3 60-119 mins....4 120-240 mins...5 over 4 hours...6
Skiing/Ice-skating.....5	Public Facility....1	____	15 mins.....1 15-29 mins.....2
	Private Facility....2		30-59 mins.....3 60-119 mins....4 120-240 mins...5 over 4 hours...6

EXHIBIT IV-2
(Continued)

Type of Exercise	Where	No. Times/ Week	Total Time Spent
Tennis/Racquet-ball.....6	Public Courts 1 Private Courts.....2	____	15 mins.....1 15-29 mins.....2 30-59 mins.....3 60-119 mins....4 120-240 mins...5 over 4 hours...6
Other (SPECIFY)			
_____...7	_____	____	15 mins.....1 15-29 mins.....2 30-59 mins.....3 60-119 mins....4 120-240 mins...5 over 4 hours...6
_____...8	_____	____	15 mins.....1 15-29 mins.....2 30-59 mins.....3 60-119 mins....4 120-240 mins...5 over 4 hours...6
_____...9	_____	____	15 mins.....1 15-29 mins.....2 30-59 mins.....3 60-119 mins....4 120-240 mins...5 over 4 hours...6

7. Does your family exercise together at all?

   Yes..... 1

   No..... 2 (SKIP TO QUESTION 9)

8. On the average about how many times a week does your family exercise together?

Once a week..... 1	Five times a week..... 5
Twice a week..... 2	Six times a week..... 6
Three times a week... 3	Seven times a week..... 7
Four times a week.... 4	

EXHIBIT IV-2
(Continued)

9. Have you ever heard of the President's Council on Physical Fitness and Sports?

   Yes..... 1

   No..... 2

   Don't know/Remember...9 (SKIP TO QUESTION 26)

10. Where did you first hear about the President's Council on Physical Fitness and Sports? (DO NOT READ RESPONSES)

    Television ad..... 1
    Newspaper ad or article..... 2
    Magazine ad or article..... 3
    Government brochure..... 4
    School..... 5
    Family..... 6
    Neighbor/Friend..... 7
    Other (SPECIFY)_____ 8

11. Have you heard about literature on exercises available from the President's Council on Physical Fitness and Sports?

    Yes..... 1

    No..... 2
    (SKIP TO QUESTION 26)
    Don't know/Remember... 9

12. How did you first hear about the literature published by the President's Council on Physical Fitness and Sports?

    Television ad..... 1
    Newspaper ad/article..... 2
    Magazine ad/article..... 3
    Government brochure..... 4
    School..... 5
    Family..... 6
    Neighbor/Friend..... 7
    Other (SPECIFY)_____ 8

13. Why did you order this literature? (DO NOT READ RESPONSES)

    You wanted to begin an exercise program..... 1

    Someone you knew wanted to begin an exercise program..... 2

    Curiosity..... 3

EXHIBIT IV-2
(Continued)

14. What was the topic of this literature?

General information about the President's Council on Physical Fitness and Sports..... 1

General information about exercise..... 2

Specific information about a type of exercise or sport..... 3

Specific information about conditioning exercises and weight control..... 4

Other (SPECIFY) _____ 5

15. Including yourself who else in your family might read this literature?

Spouse..... 1
Son..... 2
Daughter..... 3
Mother..... 4
Father..... 5
Other (SPECIFY)..... 6

16. To whom else outside of your family might you show this literature?

Friend..... 1
Relative..... 2
Teacher/Coach..... 3
Other (SPECIFY)..... 4

17. What were the major points contained in the information sent to you by the President's Council on Physical Fitness and Sports? (DO NOT READ RESPONSES; CIRCLE MULTIPLE RESPONSES)

The PCPFS offers booklets on exercise..... 1

The PCPFS sponsors seminars and programs on exercises.... 2

Exercise should be done on a daily basis..... 3

Exercise should be done for 30-60 minutes daily..... 4

Other (SPECIFY) _____ 5

_____ 6

EXHIBIT IV-2
(Continued)

18. Have you tried any of the exercises or techniques described in the information sent to you by the President's Council on Physical Fitness and Sports?

Yes..... 1

No..... 2 (SKIP TO QUESTION 20)

19. What aspects of the literature have you put into practice?

Walking..... 1

Jogging/Running..... 2

Swimming..... 3

Warm-Up/Conditioning Exercises..... 4

Following literature's advice on frequency or duration of exercises..... 5

Other (SPECIFY) _____ 6

_____

20. On the whole, how helpful was the information to you? Would you say the information was...(READ RESPONSES)

Extremely helpful..... 1

Somewhat helpful..... 2

Not very helpful..... 3

Not helpful at all..... 4

21. Have you changed your exercise habits in any ways that were not mentioned in the booklet (e.g., change in diet)?

Yes..... 1

No..... 2 (SKIP TO QUESTION 22)

EXHIBIT IV-2
(Continued)

22. In your opinion, was the information...(READ RESPONSES)

Very easy to understand..... 1

Moderately easy to understand..... 2

Moderately difficult to understand..... 3

Very difficult to understand..... 4

23. In your opinion, did the information contain...(READ RESPONSES)

Too much detail..... 1

The right amount of detail..... 2

Too little detail..... 3

24. Would you say there were...(READ RESPONSES)

Too many pictures and illustrations..... 1

The right amount of pictures and illustrations..... 2

Too few pictures and illustrations..... 3

25. How convinced are you that the information in the booklet was accurate? Would you say that it was...(READ RESPONSES)

Not at all accurate..... 1

Somewhat inaccurate..... 2

Somewhat accurate..... 3

Very accurate..... 4

26. Do you need any additional help or information about your exercise program?

Yes..... 1

No..... 2 (SKIP TO QUESTION 28)

EXHIBIT IV-2
(Continued)

27. Where would you go to get this help or information? (DO NOT READ RESPONSES)

President's Council on Physical Fitness and Sports..... 1

Friends/Neighbor/Relatives..... 2

School/Coach..... 3

Private athletic club..... 4

Public athletic club..... 5

Other (SPECIFY) _____ 6

28. Are there recreational facilities nearby your home?

Yes..... 1

No..... 2

29. What type of recreational facility is nearby?

Public gymnasium without a swimming pool..... 1

Public gymnasium with a swimming pool..... 2

Private gymnasium without a swimming pool..... 3

Private gymnasium with a swimming pool..... 4

Other (SPECIFY) _____ 5

30. What is your present marital status?

Never married..... 1

Married and living with your spouse..... 2

Married but separated from your spouse..... 3

Divorced..... 4

Widowed..... 5

Other (SPECIFY) _____ 6

EXHIBIT IV-2
(Continued)

31. What was your age on your last birthday?

_____

Refused (MARK X)____

32. Would you say you live in a... (READ RESPONSES)

Large city..... 1

Small city..... 2

Suburbs of a large city..... 3

Rural countryside..... 4

Other (SPECIFY) _____ 5

33a. Besides yourself, how many people live in your household?

_____

33b. How many of them exercise regularly, that is, twice a week or more?

_____

33c. What are the ages of those who exercise regularly?

_____

_____

_____

_____

_____

EXHIBIT IV-2
(Continued)

34. What is your annual family income, before taxes? Would you say it is...(READ RESPONSES)

Less than $5,000..... 1

$5,000 - $9,999..... 2

$10,000 - $14,999..... 3

$15,000 - $24,999..... 4

$25,000 - $34,000..... 5

$35,000 or more..... 6

Refused (MARK X) _____

35. Is your race or ethnic background primarily...(READ RESPONSES)

White..... 1

Black..... 2

Hispanic..... 3

Asian..... 4

Other (SPECIFY)..... 5

36. Are you...

Male..... 1

Female..... 2

37. What is the highest educational level you have completed?

8 years or less..... 1

Some high school..... 2

High school graduate or equivalent..... 3

Some college/technical school..... 4

College graduate..... 5

Graduate or professional degree..... 6

Current Physical Activities: Do you presently engage in regular physical exercise? If so: what activities, how often (per week), and where? If not: why not, what might encourage you? What about the rest of your family? What do they do, how often, where? Does the family exercise together at all?

Attitudes Toward PCPFS: Have you ever heard of PCPFS? If so: where, what does it do? Would you support the PCPFS, how? Have you ever participated in a PCPFS program? If so, which one? Did you recently order literature from the PCPFS? Have you received it yet (this is a manipulation check)? How did you hear about the literature? Why did you order it? What was its topic? Who will use it? Who else might be interested?

Demographics: Age, sex, marital status, family composition, nearby recreational facilities, urban or rural setting, race, income, education.

Rating of Booklet or Brochure(experimental group, follow-up control interview)

Behavioral Information: Have you read the booklet (not yet, looked at, read completely)? Have you shown it to anyone else? Can you remember the main points? Have you tried any exercises? Are you doing them regularly? How many times in the last week? Do you need additional help or information? If so, where would you go to get it?

Attitudinal Information: Ratings will be gathered using 5-point Likert-type scales,since research indicates these scales are most preferred by respondents and are easiest to understand

(Menezes & Filbert, 1979). Sample items might include: The booklet cost too much; the booklet was very helpful; the booklet was easy to understand; the booklet was too detailed; there were too many illustrations; the material was very informative; the booklet was very persuasive; the material was very convincing; the booklet was attractive; the booklet was useful; and I would recommend the booklet to other people.

DATA ANALYSIS PLAN

There are three aspects of data analysis which will be applied to the survey instruments. The first of these data analyses will compare the responses of the experimental group taken at two times. The hypothesis to be tested is this: If the literature has a sustained impact on the exercise programs of readers, an increase in the amount of exercise should result.

The second data analysis will compare the responses of the control group taken at two times. The hypothesis to be tested is: If the literature has an initial impact on the exercise program of readers, an increase in the amount of exercise should result.

The third data analysis will compare the exercise program of the experimental and control group. A first comparison involves contrasting the responses of the respondents experimental group who have received the literature with the control group respondents (who have not). This is the conventional post-test

only control group design. If the literature has an impact, the experimental group should have a higher level of exercise than the control group. The second comparison between the experimental and control group respondents involves contrasting their responses obtained in the second wave of data collection. This comparison would indicate whether the literature has a sustained impact, as well as indicating whether the control group's level of exercise increases over their level of exercise prior to receiving the literature. In a sense this latter comparison (of the two waves for the control group) is a replication of the experimental group's first wave of data collection. It differs, however, in that a baseline measure of level of exercise for the control group is obtained.

In addition to these analyses, a comparison using the demographic variables will be performed. In general, no differences are expected between the experimental and control group on these demographic variables. A demographic profile of the participants will be presented, together with census data to decide if those who request the various pieces of literature differ appreciably from the general population.

Responses of the experimental and control groups will be compared using a Chi-square where answers involve a nominal level of data. Where data is quasi-interval or ratio, between groups *t*-tests will be used to compare the experimental and control groups item-by-item. A discriminant analysis will be used to determine which items best discriminate between the experimental

and control groups.

For the follow-up survey of the control group, the change scores will be analyzed using, within groups, t-tests and Chi-squares.

V. SPONSOR INITIATED PUBLIC INFORMATION

As part of its effort to inform the general public of the importance of exercise and the link which exists between regular physical activity and such qualities as good health and effective performance, the PCPFS has helped develop a series of radio and TV public service announcements drafted to encourage Americans to engage in regular physical exercise. The Design Concepts Report suggested ways to field test the effectiveness of these messages. However, these announcements can also be tested outside the channels of distribution to assure that they will accomplish their objective.

This chapter describes two "laboratory" studies designed to evaluate the effectiveness of the announcements when presented either alone (Study I) or in combination (Study II).

The public service announcements themselves consist of 4 radio and 2 TV spots intended to encourage persons over 60 to walk at least three miles daily, and a similar set of 6 spots designed to encourage parents to see that adequate physical education programs are available to their children in schools.

The Case for Pretesting in the Laboratory

Traditionally, testing PSAs consisted of broadcasting the announcement over regular TV or radio channels and contacting recipients a day or so later to measure their reactions. This is, of course, a rather expensive process, since a large number of follow-up calls are necessary to identify a significant number of recipients who actually heard or saw the message.

Questions about the reliability and validity of such on-air testing methods have received increasing attention in recent years. Clancy and Kweskin (1971) studied 106 commercials tested on-air at least twice during the same month for recall. The average test-retest correlation was only .67, and a re-analysis based on averages for specific product categories was only .29. Although Heller (1971) found an overall test-retest correlation of .82 for 80 airings, the recall scores obtained for individual brands were of such a narrow range that they could not discriminate sufficiently for copy testing decisions.

Telephone contact after on-air exposures generally limits the questions that can be asked of recipients to simple recall measures. Yet many researchers have found that recall measures are unrelated to attitudinal or behavioral changes (Haskins, 1964; Biel; 1970). Thus, although on-air tests appear to have external validity in view of their natural settings, these tests apparently do not exhibit either the reliability or validity required for decision-making purposes.

Presentations in controlled settings, on the other hand, permit the collection of a greater variety of data in more depth. Additional dimensions can be explored such as communicator credibility, interest, likes and dislikes, behavioral and behavioroid tendencies, and reactions to controlled multiple exposures. Obviously, the costs of controlled presentations are considerably lower than full scale on-air testing. Finally, Clancy and Ostlund (1976) have suggested that laboratory presentations often result in more reliable and valid data.

STUDY I: TESTING INDIVIDUAL PSAs

In Study I, all the PSAs (8 radio and 4 TV) will be individually tested during simulated natural airings using respondent groups for which the message was specifically tailored. Measures of recall, attitudinal responses, and behavioral intentions will be administered. The resulting ratings could be used to determine which messages receive the most extensive distribution. Initial assessments will also be used to equate the messages used in the second experiment. Specifically, the ratings will be used to identify from each theme two radio messages which are about equal in their appeal to the raters. This will avoid confounding the laboratory findings by pairing strong messages with ones that are known to be relatively weak.

Sampling

Each PSA will be seen or heard and evaluated by 50 persons. Such groups could be subjected to a limited number of demographic breakdowns, and their ratings could be compared using small-sample

statistical techniques. Equal numbers of males and females should be included. Individuals in the specific target audiences - the elderly and parents with school-age children - should be sampled. Thus the total sampling needs for the ratings of the 8 radio and 4 TV spots would be 600 persons plus an additional 100 persons (50 elderly and 50 parents) for the control groups. The respondents will be pre-screened and assigned to hear the appropriate PSA, so that parents with school-aged children would be asked to listen to the PSAs concerning physical fitness programs in the schools and elderly respondents will hear messages appropriate to them.

The selection of a sampling procedure determines the extent to which the results can be generalized. The most widely generalizable sampling procedure involves a random-digit dialing telephone survey to identify qualified respondents (parents or the elderly) who would then be invited to the testing sites. A less costly technique, however, would be to stop shoppers in the vicinity of the test site and ask them to participate in the study after establishing their suitability for a particular PSA. The former is selected as a more stringent sampling procedure, but substantially more expensive to implement.

Data Collection Procedures

Each of the 8 radio and 4 TV announcements will be individually tested for effectiveness using a monadic rating technique in which only one of the PSAs will be seen by any respondent. These ratings will reveal if any of the PSAs are particularly

ineffective or stimulate negative responses.

Although other rating methods are possible, each has limitations in terms of the requirements of the present study. A paired-comparisons approach, for example, would result in a higher, more sophisticated level of data (closer to a ratio scale), but it requires comparisons between all possible message pairs. The technique is laborious, logistically complex, and would require a large number of message presentations. Rank orderings, on the other hand, could be collected quickly, but the resulting ordinal level data would not permit comparisons between these and later messages.

Location

Having rejected the on-air testing method, another presentation technique must be selected. Alternatives include portable projectors taken to individual homes; screenings inside vans or house-trailers; screening inside stores or churches, etc.; or screenings in a controlled central location. In-home exposure offers the best sampling strategy, but the expense is very high. Shoppers or church goers are usually somewhat distracted while in the store or church and do not make good respondents. Screening inside vans or trailers have the advantage of mobility, offering access to a varied sample population , but the physical quarters are often cramped and uncomfortable, thus limiting the size of the experimental group. Since many research firms maintain permanent or semi-permanent research facilities around the country in locations such as shopping malls, these settings would offer

the best research location in terms of convenience and facilities. As noted earlier, sampling will be done on a random basis by telephone. This approach was chosen in response to the stated preferences of HEW, cost being the only potential constraint on implementation.

Presentation of the Sample PSAs

Although sample messages could be directly presented to the recipients, such a presentation would be quite different from real life exposure conditions. Greater naturalism can be achieved by embedding the experimental messages in simulated radio or television program material containing the messages being tested, as well as other commercial messages. This technique has been used both for commercial messages (e.g., the PREP system, Dunn & Ziff, 1974) and public service-messages (e.g., the Health Message Testing System (HMTS) developed by the National Cancer Institute and National Heart, Lung and Blood Institute).

Respondents would be asked to wait in an outer room where the simulated program is playing in competition with other normally occurring distractions (the PREP approach). This method is complex, however it is also more naturalistic, since the message must compete for the viewer's or listener's attention as it would in a real setting. Both radio and TV spots would be presented in this manner.

Experimental Procedure

Respondents will be screened for age and parenthood to assure that they are matched with an appropriate experimental message.

Parents and elderly respondents will be invited to the testing location. After being randomly assigned to one of the appropriate PSAs, they will be asked to wait in an outer room and told that the regular interviewing room is occupied. During the waiting period they will see or hear the experimental message embedded in regular program material. Elderly respondents will see or hear the elderly message and parents will see or hear the school children message. Other commercial or PSA messages will also appear in the program materials, but only one experimental message will be presented for each group. Respondents will be neither encouraged or discouraged from listening to (for radio spots) or watching (for TV spots) the simulated material.

When consumers enter the interviewing room they will be told that this study is concerned with people's responses to messages played in natural settings such as the one they just left, and they will be asked the recall portion of the dependent measures for each of the messages in the simulated program. The experimental messages(s) will then be replayed, and the remaining dependent measures administered. Subjects will be debriefed and asked for any additional comments on the messages.

The control groups will not be exposed to the experimental message(s) at any time, but will complete the appropriate recall, attitudinal, and behavioral scales on an unrelated control message that has been pretested for effectiveness as part of the Health Message Testing System.

STUDY II: TESTING PSAs IN COMBINATION

In Study II, selected PSAs will be presented in pairs which combine either similar or dissimilar message topics. This design will measure the impact of the messages under conditions of repeated exposure when this exposure involves similar or dissimilar message pairs. Ratings similar to those collected in the first study will be gathered.

Sampling

Examining the impact of the repeated exposure of the PSAs involves six treatment groups whose size would also be 50 per group for a total sample of 300 persons. Equal numbers of males and females, consisting of elderly and parents with school-aged children, would be assigned to the groups, since some groups will be exposed to a PSA from each topic set. Participants will be identified using the same random digit dialing procedure described for Study I. In addition, 100 control group participants (50 elderly and 50 parents) will be selected.

Data Collection Procedures

The purpose of the second study is to examine the effects of PSAs on same and different topics in combination. It will not be practical to test all the PSAs together because of the large number of possible combinations. Yet, an examination of selected PSAs presented in pairs could answer two important questions. First, what is the effect of repeated exposures to PSAs with messages aimed at the same target audience?

The second research question concerns what happens when two PSAs, targeted to different audiences and containing somewhat different messages, are presented together. For example, what would be the effect of presenting one of the present PSAs encouraging the elderly to walk each day with another PSA encouraging parents to support physical education programs in their children's schools? How do these messages affect the non-target audience? Does the target audience become confused? How do the messages affect attitudes toward fitness programs in general?

Message pairs aimed at the same target audience will be referred to as consonant messages. Those message pairs aimed at different target audiences will be called non-consonant messages.

A study consisting of six experimental groups has been designed to evaluate the impact of a total of 4 radio spots or TV spots when paired with each other. The two-factor design can be pictured as follows:

MESSAGE COMBINATIONS

Elderly Persons	Parents of school children
E (1), E (2)	E (1), E (2)
SC (1), SC (2)	SC (1), SC (2)
SC, E*	SC, E*

*The non-consonant (mixed) pairs of messages will be appropriately counter-balanced so that all four possible combinations are presented equally to both audience groups.

The symbols E(1), E(2), SC(1), and SC(2) refer to radio or television PSAs which received positive and equal evaluations in

Study I. In this way, the effects of pairing combinations should not be overly disparate between the various combinations; this is especially important if the data obtained from responses to the counter-balanced non-consonant messages are to be interpretable within the framework of the design.

In the design above, there are two groups who see consonant messages, two elderly PSAs and two school children PSAs and two groups that see non-consonant messages (one elderly PSA and one school children PSA).

Each of the four message groups will be presented to the two target audiences: elderly respondents and parents. This design provides comparisons of two consonant and two non-consonant messages to each of two target audiences. Across the six cells in the 2x3 design, three types of comparisons are of interest for the analysis:

- Consonant messages directed at the target audience (e.g., SC(1), SC(2) for parents)
- Consonant messages not directed at the target audience (E(1), E(2) for parents and SC(1), SC(2) for the elderly)
- Non-consonant messages for each audience

Comparisons between these groups will provide information about targeted versus non-targeted audiences and about the effects of non-targeted messages on the target audience.

Location

Study II should use the same facilities as Study I.

Presentation of the PSAs

After respondents arrive at the facility, they will be

randomly assigned to view two PSAs in one of the experimental conditions presented above. After viewing the messages, they will be asked to recall the topic, the main idea and sponsor of the ads. They will be shown the same ads once again and asked to rate them on opinion and attitude scales.

INSTRUMENTS

A variety of dependent variables have traditionally been used to measure the impact of a persuasive message. These include measures of awareness or recall, measures of attitudes or persuasion; and measures of intentions or actual behavior. Although the literature on the reliability and validity of these various measures is voluminous, the findings, particularly concerning commercial copy testing, are not reassuring. The present study will include measures from each of these dimensions. The resulting multivariate approach will help insure the likelihood of obtaining data.

Recall

Young (1972) claims that traditional recall measures are of questionable reliability and validity, but are more likely to provide useful information about messages where the copy is rationally based and offers explicit suggestions. The present PSAs appear to be of this type, so recall will be measured. Nevertheless, a number of reviewers (e.g., Haskins, 1964) have found recall to be unrelated to attitudinal or behavioral change. Although awareness can be measured using either aided or unaided recall techniques, unaided recall appears to be the more valid

measure (Wells, 1964). In the present study, the respondents will be asked to recall what test messages they remember; any of the main points made by the messages; and the sponsor.

Attitudes and Persuasion

Several researchers have attempted to develop generalized scales to measure responses to TV commercials. Wells, Leavitt, & McConville(1971) began with nearly 1,000 words and phrases which they reduced to six table factors through several factor analyses: Humor; Vigor; Sensousness; Uniqueness; Personal Relevance; and Irritation. March and Swinbourne (1974) found only Personal Relevance, Humor, and Irritation to be related to interest in the message. Schlinger (1979) used a similar technique to develop her Viewer Response Profile (VRP) which includes the following factors: Entertainment; Confusion; Relevant News, Empathy; Familiarity; Alienation; and Brand Reinforcement. Schlinger also included the Wells, et al. terms in her analysis, and found considerable congruence between the two factor structures. The VRP uses a 6-point Likert-type response format. For the purposes of the present study, a reduced set of items will be drawn from the most meaningful dimensions of the two combined scales: Personal Relevance/Relevant News; Entertainment/Humor/Vigor; Alienation/ Irritation; Empathy; and Confusion. Both articles report reliability data, as well as some field tests of validity.

Behavioral Intentions

A subjective probability scale will be used to assess the likelihood that the recipient will actually engage in the behaviors recommended by the PSA. A similar scale has proven reliable and valid at least when predicting buying behavior (Gruber, 1970).

In addition, some attempt might be made to measure actual behavior by offering the respondent an opportunity to engage in a small related behavior during the interview. A simple measure would involve making preprinted forms available to order the appropriate literature from the President's Council on Physical Fitness and Sports. These forms could be coded so that the number of forms actually mailed could be recorded. Follow-up phone calls could be made in 2-3 weeks to see if the respondent actually engages in the recommended behaviors.

Background and Demographics

Respondents will be asked a few brief demographic items including sex, age, income, and family status. Also, they will be asked if they have ever engaged in the recommended behavior or any related behaviors.

Questionnaires for the two studies are included in Exhibits V-1 and V-2.

EXHIBIT V-1

PSA CONSUMER RESPONSE QUESTIONNAIRE (STUDY I)

Dear Participant,

We are interested in people's responses to commercials or public announcements when heard under normal listening conditions. While you are in the waiting room you may have heard part of a radio program being played in the background. Do you remember hearing any commercials or public announcements? If so, would you please describe the ones that you remember below? If not, please go to the next page.

(1) List General Topic: _____

List the Main Ideas You Remember:
(a) _____
(b) _____
(c) _____
(d) _____

List the Sponsor's name if you Remember: _____

(2) List General Topic: _____

List the Main Ideas You Remember:
(a) _____
(b) _____
(c) _____
(d) _____

List the Sponsor's Name if You Remember: _____

EXHIBIT V-1
(Continued)

2. In the past two months have you engaged in any regular physical exercise such as walking, golf, swimming, health spa, calisthenics, etc.

_____ Yes
_____ No (skip to question 5)

3. List the kinds of exercise or the sports you have done in the past two months:

_____

_____

_____

4. In an average week, how many times do you engage in exercise or sports?

_____ times a week

5. Taking everything into account, what do you think are the chances you will start a program of regularly walking three miles a day for exercise?

_____ Almost certainly
_____ Probably
_____ Possibly
_____ Probably not
_____ Almost certainly not

6. Have you ever heard of the President's Council on Physical Fitness and Sports before today?

_____ Yes
_____ No (Skip to question 9)

7. Where did you first hear about the President's Council on Physical Fitness and Sports?

_____ TV ad
_____ Radio ad
_____ TV or radio program (talk show, news, documentary, etc.)
_____ Magazine or newspaper
_____ School
_____ Some place else (List_____)
_____ Not sure

EXHIBIT V-1
(Continued)

8. Describe briefly what you know or remember about the purpose of the President's Council on Physical Fitness and Sports:

_____

_____

_____

9. One goal of the President's Council on Physical Fitness and Sports is to encourage every American to get regular physical exercise. How important do you feel this goal is?

____ not at all important
____ slightly important
____ moderately important
____ very important

We are now going to replay the public service announcement sponsored by the President's Council on Physical Fitness and Sports. Please listen carefully, then answer the following questions about the announcement.

10. Below is a series of statements about the messages you heard. Please read each statement then circle the one number that best represents how much you agree with that statement:

1	2	3	4	5	6
strongly disagree	moderately disagree	somewhat agree	somewhat disagree	moderate -ly agree	strongly agree

1. The announcement was lots of fun to listen to.

1 2 3 4 5 6

2. I thought the message was worth remembering.

1 2 3 4 5 6

EXHIBIT V-I
(Continued)

3. The announcement was very realistic--that is, true to life.

1 2 3 4 5 6

4. The announcement was very original.

1 2 3 4 5 6

5. The announcement was stupid.

1 2 3 4 5 6

6. I learned something from the announcement I didn't know before.

1 2 3 4 5 6

7. I liked the announcement.

1 2 3 4 5 6

8. The message was too complex.

1 2 3 4 5 6

9. I believe the message.

1 2 3 4 5 6

10. The message was meaningful to me

1 2 3 4 5 6

11. I thought the announcement was clever and quite entertaining.

1 2 3 4 5 6

12. I wasn't sure what was going on.

1 2 3 4 5 6

13. I disliked the announcement.

1 2 3 4 5 6

14. The message was important to me.

1 2 3 4 5 6

EXHIBIT V-1
(Continued)

15. I thought the announcement was acting out what I feel sometimes.

1 2 3 4 5 6

16. The announcement irritated me-- it was annoying.

1 2 3 4 5 6

17. The announcement didn't have anything to do with me or my needs.

1 2 3 4 5 6

18. In general, I would believe what the person who delivered the announcement had to say.

1 2 3 4 5 6

19. Taking everything into account, what do you think are the chances you will start a program of regularly walking three miles a day for exercise?

_____ Almost certainly
_____ Probably
_____ Possibly
_____ Probably not
_____ Almost certainly not

Finally, we would like to ask you a few questions about yourself:

11) If you have any children, what are their ages and sex.

I have _____son(s); Ages; _____, _____, _____, _____

I have _____daughter(s); Ages; _____, _____, _____, _____

12) How old are you? _____ years old.

13) What is your marital status? Are you now

_____ Married
_____ Divorced
_____ Widowed
_____ Separated
_____ Never Married

EXHIBIT V-1
(Continued)

The following two questions will help us group our participants for statistical purposes. Remember all the information you give us is completely confidential.

14) What was your approximate family income last year?

_____ Less than $5,000
_____ $5,000-6,999
_____ $7,000-9,999
_____ $10,000-14,999
_____ $15,000-19,999
_____ $20,000-24,999
_____ More than $25,000

15) What is the highest educational level you have completed?

_____ 8 years or less
_____ Some high school
_____ High school graduate or equivalent
_____ Some college or technical school
_____ College graduate
_____ Graduate or professional degree

16) Just to be sure we are representing all groups in our survey, please tell me whether you describe yourself as:

_____ American Indian or Alaskan Native
_____ Asian or Pacific Islander
_____ White-- not of Hispanic origin
_____ Black -- not of Hispanic origin
_____ Hispanic

Thank you very much. Your responses will help us decide which of the President's Council on Physical Fitness and Sport's announcement will be aired in the next few months. We hope you will listen for them. In addition you will be given an order blank if you wish to order material from the Council.

EXHIBIT V-2

PSA CONSUMER RESPONSE QUESTIONNAIRE (STUDY II)

Dear Participant,

We are interested in people's responses to commercials or public announcements when heard under normal listening conditions. While you are in the waiting room you saw two television messages. Please describe what you remember about those messages below.

FIRST MESSAGE

(1) List General Topic: _____

List the Main Ideas You Remember:
(a) _____
(b) _____
(c) _____
(d) _____

List the Sponsor's name if you Remember: _____

SECOND MESSAGE

(2) List General Topic: _____

List the Main Ideas You Remember:
(a) _____
(b) _____
(c) _____
(d) _____

List the Sponsor's Name if You Remember: _____

EXHIBIT V-2
(Continued)

2. In the past two months have you engaged in any regular physical exercise such as walking, golf, swimming, health spa, calisthenics, etc.

_____ Yes
_____ No (skip to question 5)

3. List the kinds of exercise or the sports you have done in the past two months:

_____

_____

_____

4. In an average week, how many times do you engage in exercise or sports?

_____ times a week

5. Taking everything into account, what do you think are the chances you will start a program of regularly walking three miles a day for exercise?

____ Almost certainly
____ Probably
____ Possibly
____ Probably not
____ Almost certainly not

6. Had you ever heard of the President's Council on Physical Fitness and Sports before today?

_____Yes

_____ No (skip to question 9)

7. Where did you first hear about the President's Council on Physical Fitness and Sports?

_____ TV ad

_____ Radio ad

EXHIBIT V-2
(Continued)

_____ TV or Radio program (talk show, news, documentary, etc.)

_____ Magazine or newspaper

_____ School

_____ Some place else (List _____)

_____ Not sure

8. Describe briefly what you know or remember about the purpose of the President's Council on Physical Fitness and Sports:

_____

_____

_____

9. One goal of the President's Council on Physical Fitness and Sports is to encourage every American to get regular physical exercise. How important do you feel this goal is?

____ not at all important
____ slightly important
____ moderately important
____ very important

10. We are now going to replay one of the public service announcements sponsored by the President's Council on Physical Fitness and Sports. Please watch carefully, then answer the following questions about the announcement.

EXHIBIT V-2
(Continued)

Below is a series of statements about the first message you heard. Please read each statement then circle the one number that best represents how much you agree with that statement about the first message.

1	2	3	4	5	6
strongly disagree	moderately disagree	somewhat agree	somewhat disagree	moderate -ly agree	strongly agree

1. The announcement was lots of fun to listen to.

   1 2 3 4 5 6

2. I thought the message was worth remembering.

   1 2 3 4 5 6

3. The announcement was very realistic-- that is, true to life.

   1 2 3 4 5 6

4. The announcement was very original.

   1 2 3 4 5 6

5. The announcement was stupid.

   1 2 3 4 5 6

6. I learned something from the announcement I didn't know before.

   1 2 3 4 5 6

7. I liked the announcement.

   1 2 3 4 5 6

EXHIBIT V-2
(Continued)

8. The message was too complex.

1 2 3 4 5 6

9. I believe the message.

1 2 3 4 5 6

10. The message was meaningful to me

1 2 3 4 5 6

11. I thought the announcement was clever and quite entertaining.

1 2 3 4 5 6

12. I wasn't sure what was going on.

1 2 3 4 5 6

13. I disliked the announcement.

1 2 3 4 5 6

14. The message was important to me.

1 2 3 4 5 6

15. I thought the announcement was acting out what I feel sometimes.

1 2 3 4 5 6

16. The announcement irritated me-- it was annoying.

1 2 3 4 5 6

17. The announcement didn't have anything to do with me or my needs.

1 2 3 4 5 6

18. In general, I would believe what the person who delivered the announcement had to say.

1 2 3 4 5 6

EXHIBIT V-2
(Continued)

11. We are now going to replay another public service announcement sponsored by the President's Council on Physical Fitness and Sports. Please watch carefully, then answer the following questions about the announcement.

Below is a series of statements about the second message you heard. Please read each statement then circle the one number that best represents how much you agree with that statement about the first message.

1	2	3	4	5	6
strongly disagree	moderately disagree	somewhat agree	somewhat disagree	moderate -ly agree	strongly agree

1. The announcement was lots of fun to listen to.

1 2 3 4 5 6

2. I thought the message was worth remembering.

1 2 3 4 5 6

3. The announcement was very realistic-- that is, true to life.

1 2 3 4 5 6

4. The announcement was very original.

1 2 3 4 5 6

5. The announcement was stupid.

1 2 3 4 5 6

6. I learned something from the announcement I didn't know before.

1 2 3 4 5 6

7. I liked the announcement.

1 2 3 4 5 6

EXHIBIT V-2
(Continued)

8. The message was too complex.

1 2 3 4 5 6

9. I believe the message.

1 2 3 4 5 6

10. The message was meaningful to me

1 2 3 4 5 6

11. I thought the announcement was clever and quite entertaining.

1 2 3 4 5 6

12. I wasn't sure what was going on.

1 2 3 4 5 6

13. I disliked the announcement.

1 2 3 4 5 6

14. The message was important to me.

1 2 3 4 5 6

15. I thought the announcement was acting out what I feel sometimes.

1 2 3 4 5 6

16. The announcement irritated me-- it was annoying.

1 2 3 4 5 6

17. The announcement didn't have anything to do with me or my needs.

1 2 3 4 5 6

18. In general, I would believe what the person who delivered the announcement had to say.

1 2 3 4 5 6

EXHIBIT V-2
(Continued)

12. Taking everything into account, what do you think are the chances you will start a program of regularly walking three miles a day for exercise?

_____ Almost certainly
_____ Probably
_____ Possibly
_____ Probably not
_____ Almost certainly not

Finally, we would like to ask you a few questions about yourself:

13. If you have any children, what are their ages and sex.

I have _____son(s); Ages; ____, _____, _____, _____

I have ____daughter(s); Ages; _____, _____, _____, _____

14. How old are you? _____ years old.

15. What is your marital status? Are you now

_____ Married
_____ Divorced
_____ Widowed
_____ Separated
_____ Never Married

The following two questions will help us group our participants for statistical purposes. Remember all the information you give us is completely confidential.

16. What was your approximate family income last year?

_____ Less than $5,000
_____ $5,000-6,999
_____ $7,000-9,999
_____ $10,000-14,999
_____ $15,000-19,999
_____ $20,000-24,999
_____ More than $25,000

17. What is the highest educational level you have completed?

_____ 8 years or less
_____ Some high school
_____ High school graduate or equivalent
_____ Some college or technical school
_____ College graduate
_____ Graduate or professional degree

18. Just to be sure we are representing all groups in our survey, please tell me whether you describe yourself as:

_____ American Indian or Alaskan Native
_____ Asian or Pacific Islander
_____ White-- not of Hispanic origin
_____ Black -- not of Hispanic origin
_____ Hispanic

Thank you very much. Your responses will help us decide which of the President's Council on Physical Fitness and Sport's announcement will be aired in the next few months. We hope you will listen for them. In addition you will be given an order blank if you wish to order material from the Council.

DATA ANALYSIS TECHNIQUES

A demographic profile for the consumers in each experimental group will be prepared. Chi-square tests will be used to ensure that experimental and control groups are roughly similar.

Much of the questionnaire data consist of what are typically considered equal appearing interval scales including the probability scales, and the Likert-type items. Means and standard deviations will be derived for these items. In the 2 X 2 experimental design the means will be compared using a 2 X 2 multivariate analysis of variance (MANOVA). Demographic variables of interval level such as income and education can be used as covariates to ascertain their effects on the results. The MANOVA will also offer a check on the dimensionality of the Likert items. The various messages will be compared within topic and media technique using a one-way MANOVA. Post hoc comparisons will be done between messages using the Newman-Keuls technique. Each message will be compared to the control group using orthogonal contrasts. Non-parametric items will be compared using the Chi-square statistic. Each of these statistical techniques is discussed in Weiner (1971).

VI. TESTING, AWARDS AND OTHER COMPETITIVE EVENTS

The Design Concepts Report concluded that, from a practical standpoint, the programs in this cluster which are most amenable to evaluation are the Track and Field Youth Program and the Presidential Physical Fitness Award Program. Further, their evaluability is limited to their effects on related community based fitness and/or sports programs. The following evaluation design is developed within these parameters.

RESEARCH OBJECTIVES

The objectives of the research design, expressed as researchable questions, are as follows:

- Specifically, how are the Fitness Award and Track and Field Youth programs implemented at the local, regional and national levels? Who are the actors and what are their roles and responsibilities?
- What are the trends in the level and quality of participation and outcomes?
- What are the expected effects on local programs? What are the assumptions underlying these expectations?
- What are the specific activities that generate these effects?
- What have been the actual (both intended and unintended) effects? How did they occur?

- Within the framework of these programs, what could be done to improve their effects on local programs?

TECHNICAL APPROACH

The approach to achieving the research objectives has two components. The first is an exploratory study to obtain detailed information on the operational characteristics of the programs and their expected outcomes. Emphasis will be placed on examining the validity of the assumed relationships between program activities and expected outcomes, in this case effects on community based programs. Key program implementors will be identified for each of the two programs and interviewed either in person or by telephone. Exhibit VI-1 contains guides for interviews with national program implementors. We have already identified the following individuals and organizations to be contacted concerning program implementation and operating characteristics. Others will be identified and contacted as necessary.

Track and Field Youth Program

- Mr. Nick Hill, account supervisor, Ketchum, McLeod and Grove, Pittsburgh, Pa.
- Mr. Jim Johnson, Track and Field Hall of Fame, Charleston, W.Va.
- Mr. Thad Studstill, National Recreation and Park Association

Fitness Award Program

- Dr. Ray Ciscek, AAHPERD, Washington, D.C.

The output of this initial component will be a concise yet comprehensive description and analysis of the programs' intended outcomes, activities, linkages and outputs. The findings can be presented as a freestanding interim document and/or incorporated

EXHIBIT VI-1

GUIDE FOR INTERVIEWS WITH NATIONAL PROGRAM IMPLEMENTORS

IDENTIFIERS

1. Name and organizational affiliation of interviewee:

2. Program addressed:

3. Date of interview:

4. Method of interview:

TOPICS

1. Determine interviewee's perception of what the program is intended to accomplish.

2. Determine interviewee's perception of the needs and characteristics of the target group.

3. Determine interviewee's perception of how the program operates, who the key actors are and how they interrelate.

4. Determine interviewer's perception of <u>exactly</u> how community organizations are enlisted to participate in the program. Determine characteristics of their retention from year-to-year.

5. Determine interviewee's perception of the nature, extent and importance of PCPFS involvement.

6. Determine interviewee's role in program implementation and how long involved.

7. Determine how local implementors promote the program in terms of attracting participants.

8. Determine interviewee's perception of recent or expected changes in program objectives, priorities, operations, funding levels and implementors.

9. If appropriate interviewee determine levels of program output (identify time period). Relevant measures by program are:

<u>Fitness Awards Program</u>

- Number of participants (by age category)
- Number of awards (by age category number of years awarded)

- Number of schools participating
- Number of other institutions participating

Track and Field Youth Program

- Number of participants
- Number and type of community organizations participating

10. Determine trends in levels of program output and changes in the composition of participating organizations and individuals.

11. If appropriate interviewee, determine sources and amounts of program revenues and expenditures at the national level.

12. Determine interviewee's perception of what could be done to improve program performance, including impacts on local programs.

it the larger analysis.

The second component of the design is a survey of local implementing agencies and institutions. Following EEW guidance, this survey will consist of clustered site visits in ten metropolitan areas. Consistent with the research objectives, the purpose of the survey is to obtain information on the actual affects of the two programs on the quality of the fitness and/or sports programs initiated by local participating organizations and institutions. For example, do schools which participate in the Fitness Awards Program feel that their physical education programs have improved in quality as a result of this participation? Or, do community recreation agencies feel that their programs have benefitted from expertise gained as a result of participating in the Track and Field Youth Program? Exhibits VI-2 and VI-3. contain interview guides addressed to local implementors in the Fitness Awards Program and the Track and Field Youth Program, respectively.

The instruments are designed to be interview guides rather than structured questionnaires. This feature permits the interviewer to tailor the wording or order his/her inquiries to varying types of situations and respondents while ensuring consistency in the information obtained. Each participating institution or organization will be treated as a respondent; all questions will be asked of all organizations. It is also believed that this feature precludes the need for OMB clearance

EXHIBIT VI-2

INTERVIEW GUIDE FOR LOCAL IMPLEMENTORS OF THE FITNESS AWARDS PROGRAM

IDENTIFIERS

1. Name and organizational affiliation of interviewee:
2. Date of interview:
3. Method of interview:

TOPICS

1. Characteristics of the student population and enrollment area.
2. Length and timing of involvement in the Program.
3. Motives/reasons for initial and subsequent involvement.
4. Children's/youth's reaction to Program.
5. Methods of Program promotion and implementation, including resource requirements.
6. Changes in fitness component of its physical education program since involvement in the Fitness Awards Program.
7. Immediate and underlying causes of program change (if applicable).
8. Plans for continued involvement in the Fitness Awards Program.
9. Suggestions for improving effectiveness of the Fitness Awards Program, including effects on the institution's fitness program.

EXHIBIT VI-3

INTERVIEW GUIDE FOR LOCAL IMPLEMENTORS OF THE TRACK AND FIELD YOUTH PROGRAM

IDENTIFIERS

1. Name and organizational affiliation of interviewee:

2. Date of interview:

3. Method of interview:

TOPICS

1. Length and timing of involvement in the Program.

2. Motives/reasons for initial and subsequent participation.

3. Youth's reaction to Program.

4. Methods of Program promotion and implementation, including resource requirements.

5. Changes in the organization's sports and/or fitness program since involvement in the Track and Field Youth Program.

6. Immediate and underlying causes of program change (if applicable).

7. Plans for continued involvement in the Track and Field Youth Program.

8. Suggestions for improving effectiveness of the Track and Field Youth Program, including effects on the organization's sports/fitness program.

required of structured questionnaires. To further ensure consistent data, interviewers will be trained in the proper use of the instruments and their informational objectives.

The informational objectives associated with each topic can, generally, be readily inferred. Together, they should address all relevant information needs. Topics five and six are particularly crucial to the assessment in that the resulting information will serve to identify any association between participation in these Programs and changes in locally instituted programs. Further, topic six seeks to determine if the Fitness Awards Program or the Track and Field Youth Program contributed to such changes. The topic is consciously worded to avoid reference to either Program as doing so may produce a positively biased response concerning the affects of the Programs.

SAMPLING PLAN

As noted earlier, clustered site visits will be made to institutions and recreational agencies in ten metropolitan areas. The selection of the areas was done to reflect first geographic dispersion across the nation and second the existence or non-existence of functioning Governor's Councils, as indicated by evidence of an executive director or other equivalent staff member.1/ The application of this latter criterion may shed some

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1/ It is recognized that evidence of staff is not a completely reliable indicator of a Council's influence on local programs. It was chosen because of the absence of other data for identifying "weak" versus "strong" councils.

light on the possible effects of the Councils on community-based fitness and sports programs. No other relevant selection criteria are apparent. The ten metropolitan areas are as follows:

Areas With Governor's Council Staff	Other States
Detroit, MI.	Indianapolis, IND.
New York, N.Y.	Oklahoma City, OK*/
Baltimore, MD.	San Francisco, CA.
Atlanta, GA.	Minneapolis, MINN.
Albuquerque, N.M.	Seattle, WA.

Within each area, a minimum of ten sites will be selected for visits; five will be Fitness Award Program sites, and five will be Track and Field Youth Program sites. They will be selected primarily on a random basis from lists obtained from the American Alliance of Health, Physical Education, Recreation and Dance Directors and the State Chairmen of the National Recreation and Parks Association.

SURVEY PROCEDURES

Letters will be sent (preferably on HEW letterhead) to identified individual respondents describing the progress of the survey and inviting their participation. Follow-up telephone calls will be made within two weeks to confirm participation and schedule visits. One staff member will be assigned to each metropolitan area and will be responsible for the sites in that area.

---

*/ Has a Governor's Council, but no identified staff.

The first area will serve as a pilot test of the interview guides. Two interviewers will be employed for the purpose of testing the consistency of the data obtained. Following this round of visits, responses will be analyzed for consistency and completeness and all necessary adjustments to the interview guides and interview instructions will be made.

Employing two or three interviewers, sites in the nine remaining clusters will be visited. All documentation will be completed for a site cluster before another one is visited.

DATA ANALYSIS

As the data obtained will be almost entirely narrative in nature, a considerable amount of content analysis and coding of responses will be required. Following this, a number of descriptive statistics will be developed and associations explored. By way of examples for the Fitness Awards Program, the following variables and relationships will be analyzed:

- Distributions of the length and timing of program involvement.
- Motives for initial and continued involvement.
- Numbers of participants: total, average, proposition, changes over time.
- Methods of program implementation and promotion including resource requirements.
- Causes of changes (if any) in the institutions' fitness component of their physical education program since involvement with the Fitness Awards Program.
- Relationship of methods of program implementation and promotion to participation.

- Plans and rationales for continued involvement in the Fitness Awards Program.
- Suggestions for improving program effectiveness.

Similar types of variables and relationships will be analyzed for the Track and Field Youth Program.

VII. DEMONSTRATION CENTER SCHOOLS PROGRAM

This chapter describes a framework for evaluating the Demonstration Center Schools Program. Two survey instruments are presented and procedures for analyzing the survey data are recommended.

The mechanics of the Program are that the PCPFS's staff contacts state education agencies (SEAs) with information with which to upgrade school fitness programs, including an explanation of the demonstration center concept and the PCPFS's criteria for school certification. The SEAs make a decision on whether they will participate in the program.

If they decide to participate, they disseminate information to schools throughout the state, possibly add to the PCPFS certification criteria and perform a check on the applications of candidate schools. Because of the heavy role played by the SEAs in the program and because one objective of this research is to gain an understanding of the affects of the Demonstration Center Schools or other schools, the approach presented in the Design Concepts Report has been modified to include a mail survey of SEAs, as well as the current Demonstration Center Schools.

RESEARCH OBJECTIVES

The major intended long-term impact of the program is to increase the fitness of youth. However, as set forth in the Design Concepts Report, an absence of acceptable and readily accessible measures of the fitness status of school populations makes the Demonstration Schools Program "unevaluable" in terms of its direct effects on the fitness of youth.

The following study, then, must evaluate other intended effects of the program. The three major questions which this study will address are:

- To what extent did Demonstration Schools upgrade their physical education curricula as a result of the Program?
- To what extent do the Demonstration Schools promote their curricula and the Program?
- To what extent do these promotional efforts induce other schools to upgrade their physical education curricula?

TECHNICAL APPROACH

There are no sampling issues for this assessment, because we plan to survey the education agencies in all states which participate in the program and all current Demonstration Schools in these states. (There are approximately 120 Demonstration Schools in approximately twenty states.) The procedure will involve mailing the state agency instrument to the designated contact persons in each participating state. This list will be provided by the PCPFS staff. The questionnaire will be accompanied by a cover letter on HEW stationery explaining the purpose of the survey and indicating that the schools are also being surveyed.

A like approach will be used for the schools, although we expect to send the school mailing about a week later than the agency mailing. This should avoid the confusion or resentment that could occur if state agencies receive inquiries about the survey from the schools before the agencies have become aware of the study. Non-respondents will receive a mail follow-up after two weeks and a telephone follow-up two weeks later if they still have not returned questionnaires.

SURVEY INSTRUMENTS

We have constructed two mail questionnaires, shown in Exhibits VII-1 and 2. The first one will be mailed to the Demonstration Program state coordinators within the participating State Departments of Education. The second instrument will be mailed to principals of Demonstration Center Schools.

Much of the data collected will consist of the descriptions and impressions of the respondents. Whenever possible, survey questions have been constructed to produce responses that can be ordinally scaled so that descriptive measures (e.g., means, frequency distributions) can be computed. Many responses, however, will yield only nominal or categorical data. Frequently distributions generally will still be computed, but scaled responses will not be possible. However, some categorical responses will later be assigned values for the purpose of more precisely describing relative performance. For example, a Demonstration School which publicizes the program through demonstrations versus one which simply distributes a letter announcing a visitation schedule would be rated as doing more to promote the program.

EXHIBIT VII-1

STATE EDUCATION AGENCY INSTRUMENT

1. How many years has your state been participating in the National Physical Fitness Demonstration School Project of the President's Council on Physical Fitness and Sports (PCPFS)?

_____ Years
Initial School Year of Participation_____

2. Please give the number of newly designated Demonstration Centers for each of the school years listed below. (Schools should not be included in the totals after their first year of designation.)

	69-70	70-71	71-72	72-73	73-74	74-75	75-76	76-77	77-78	78-79
New Demonstration Centers										

3. How does the State Education Agency inform schools regarding the Demonstration Schools Program?

_____ Correspondence to the District Superintendent
_____ Correspondence to Elementary and Secondary School Principals
_____ Other:_____

A. Please enclose a copy or describe the information which is disseminated.

4. Please list below the criteria used by your agency for selecting elementary and secondary Physical Education Demonstration Center Schools.

A. Elementary School Criteria (ATTACH ANY AVAILABLE DOCUMENTATION)

1. _____
_____

2. _____
_____

3. _____
_____

4. _____
_____

5. _____
_____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

13. _____

14. _____

15. _____

B. Secondary School Criteria (ATTACH ANY AVAILABLE DOCUMENTATION)

☐ Please check if the same criteria are used for both elementary and secondary schools.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____
_____

8. _____
_____

9. _____
_____

10. _____
_____

11. _____
_____

12. _____
_____

13. _____
_____

14. _____
_____

15. _____
_____

5. How does the State Education Agency certify that the school meets the criteria of the Demonstration Program? (Check all that apply.)

_____ Letter to the State Education Agency from the School District stating compliance with the criteria
_____ Letter to the State Education Agency from the individual school stating compliance with the criteria
_____ Documentation mailed by the Local School District showing that the school meets the criteria
_____ Documentation mailed by the individual school to the State Education Agency
_____ State Education Site Visit
_____ Other: _____

6. Does the State Education Agency disseminate to all schools a list of current Demonstration Schools or Honor Roll Schools?

☐ Yes

☐ No

7. How does the State Education Agency promote the Demonstration Schools Program? (Check all that apply.)

_____Correspondence to physical education teachers of program
_____Presentations to PTAs
_____Presentations to teachers or administrators
____ Assist individual Demonstration Schools to promote or publicize their Physical Education Program. If so, how: _____

_____Other: _____

8. Does the State Education Agency monitor the promotional efforts of the Demonstration Schools to determine whether it is actively promoting the program?

___ Yes
___ No

A. If 'YES', please describe how: _____

9. For the academic years 1978-79 and 1979-80, how many schools have applied to be Demonstration Center Schools? (Do not include those previously designated as Demonstration Centers.)

	78-79	79-80
Elementary		
Secondary		

10. What percentage of schools in your state do you believe presently meet the Demonstration Center criteria? What percentage do you believe met the criteria just prior to your state's participation in the Program?

	Prior to state participation in the Program	Presently
Elementary	_____	_____
Secondary	_____	_____

EXHIBIT VII-2

DEMONSTRATION SCHOOL INSTRUMENT

1. Name of School_____
   City_____
   State_____ Zip_____

2.A. What is your school's current enrollment?

_____ Students

B. What was your school's enrollment size the year prior to first being designated as a Demonstration School?

3. What are the grade levels at your school?

Grade ____ through Grade _____

4. Is this the first year your school has been designated as a Demonstration Center?

____Yes
____No

A. If 'NO', how many other years was your school designated as a Demonstration School?

_____ Years

B. If answer is 3 or more years, under 4.A., was your school previously on the President's Council on Physical Fitness and Sports (PCPFS) Honor Roll?

____ Yes
____ No

5. From what sources did you or staff at your school first become aware of the PCPFS Demonstration Center School Program?

____Local School District Office
____Staff of a Demonstration School
____State Education Board or Agency Staff
____Received PCPFS Literature
____At own initiative. Please describe_____
_____
____Other:_____

6. Did another Demonstration School or Honor Roll School actively participate in the development or implementation of your Demonstration Program?

EXHIBIT VII-2
(Continued)

A. If 'YES', please describe the other school's effort:_____
_____
_____

7. Why did your school wish to participate in the Demonstration Center Program? (Check all that apply.)

____To publicize what was felt to be an already well-developed Physical Education Program
____To improve the physical fitness of students
____Parent/community encouragement
____To justify to local district school board a need for increased physical education budget
____Faculty attitudes and interests
____State and/or local Education agency encouragement
____Encouragement of another Demonstration school
____Other, Please describe:_____

8. Did your school's Physical Education Program meet the State Education Agency's Demonstration Center criteria prior to application for designation as a Demonstration School?

____Yes
____No

9. Listed below are the guidelines set by the President's Council on Physical Fitness and Sports that schools should meet to be designated as a Demonstration Center. Please complete the information requested in terms of: (a) which criteria your school had already met prior to its becoming a Demonstration School; (b) which criteria the school took specific steps to meet in order to qualify as a Demonstration School; and (c) for those criteria for which specific steps were taken what was done to meet the criteria.

EXHIBIT VII-2
(Continued)

DEMONSTRATION SCHOOL CRITERIA OF PCPFS

a. Already Met Guidelines Prior to Application for Demonstration Program	b. Took Steps to Qualify as a Demonstration School	
☐	☐	1. Periodic health appraisals for all pupils. Health appraisals (through the family physician, dentist, school or community services) should include: identification of pupils with corrective orthepedic defects and other health problems, a posture check, and height and weight measurements. Pupils with acute problems should be referred to the proper medical authorities. c. Indicate any actions taken to meet this criterion for certification as a Demonstration Center School. _____ _____
☐	☐	2. Identification of the physically underdeveloped and a program to eliminate or alleviate their problems. Special programs of physical education should be provided those pupils with orthopedic problems, obesity, perceptual motor problems, and other health-related problems Such students may suffer from physical underdevelopment, malnutrition or inadequate coordination. c. Indicate any actions taken to meet this criterion for certification as a Demonstration Center School. _____ _____
☐	☐	3. Physical achievement tests a minimum of twice a year to evaluate and motivate pupil progress. c. Indicate any actions taken to meet this criterion for certification as a Demonstration Center School. _____ _____

EXHIBIT VII-2
(Continued)

a.	b.	
☐	☐	4. Opportunities for pupils to win the Presidential Physical Fitness Award.
		c. Indicate any actions taken to meet this criterion for certification as a Demonstration Center School.
☐	☐	5. A daily period of physical education for each grade emphasizing physical fitness for all pupils (where schools are on flexible schedules, adjustments of this requirement may be worked out if approved by the PCPFS). Activities should be identified and addressed in progressive order.
		c. Indicate any actions taken to meet this criterion for certification as a Demonstration Center School.
		_____
		_____
☐	☐	6. The school physical education program should include a core of developmental and conditioning activities appropriate for each grade level.
		c. Indicate any actions taken to meet this criterion for certification as a Demonstration Center School.
		_____
		_____
☐	☐	7. Physical education programs should be planned to include physiological fitness goals along with other educational aims needed to meet the developmental needs of children; thus, activities must be adapted to individual needs and capacities and be vigorous enough to increase energy utilitilization and heart rate significantly.
		c. Indicate any actions taken to meet this criterion for certification as a Demonstration Center School.
		_____
		_____

EXHIBIT VII-2
(Continued)

a.	b.	
☐	☐	8. Demonstration standards for survival activities, particularly including swimming, should be established and competence maintained by periodic testing and training.
		c. Indicate any actions taken to meet this criterion for cerfication as a Demonstration Center School.
☐	☐	9. Community education on physical fitness in physical education through a gala and other public information activities.
		c. Indicate any actions taken to meet this criterion for certification as a Demonstration Center School.
☐	☐	10. Scheduling visitations as necessary and appropriate to accommodate visitors wanting to observe the program.
		c. Indicate any actions taken to meet this criterion for certification as a Demonstration Center School.

EXHIBIT VII-2
(Continued)

11.A. How many full-time equivalent physical education teachers does your school have now?____

B. How many full-time equivalent physical education teachers did your school have the year prior to first being designated as a Demonstration school? ____

How many of these full-time equivalent teachers are certified in physical education?____

C. How many full-time equivalent physical education teachers did your school have at the time of its initial designation as a Demonstration school?____

How many of these full-time equivalent teachers were certified in physical education at that time?____

12.A. What is your budget for physical education now?

Equipment $_____

Salary $_____

B. What was your school's budget for physical education the year prior to first being designated as a Demonstration School?

$_____

C. What was your school's budget for health and physical education in its first year as a Demonstration School?

$_____

13. How is your school promoting the Demonstration School Program? (Check all that apply.)

___School Visits. If checked, please describe the method for visitation (visitation schedule, how staff from other schools are encouraged to observe your program, etc.):_____
_____

___Mass Media Coverage

___Special physical education program demonstrations. If checked, describe your demonstration program:_____
_____
_____

___Working with community or professional groups. If checked describe activities and identify groups:_____

_____

_____

___Newsletters or other mailings

___Other. Describe:_____

_____

14.A. How many schools have visited your school to observe your physical education program?

_____ Schools

B. How many other schools has your school notified or otherwise contacted to inform them of the program?

_____ Schools

15. How many other schools that have visited your program or that you contacted indicated they planned to take steps to become a Demonstration School or otherwise upgrade their physical education programs in accordance with your state education agency's criteria?

_____ Schools

16. Has your school's Demonstration Center Program brought about any new interactions with other agencies, schools or community groups or any new physical education, fitness or sports programs in the community? If so, please describe them.

_____

_____

_____

Items on the surveys can be grouped into five categories of research questions. These questions are designed to address the major objectives being evaluated. The categories are: (a) program background and context, including Demonstration Program criteria in each state and size of the program in each state; (b) effect of the Demonstration School Program on the physical education programs of schools and the community; (c) methods for certifying qualifications of Demonstration Schools; (d) promotional efforts of State education agencies and local schools; and results of promotional activities.

DATA ANALYSIS PLAN

The analysis approach basically will consist of cross-sectional analyses to assess program differences between individual Demonstration Schools and between State education agencies. However, retrospective "longitudinal" analyses of program effects also will be conducted based on the data reported in the survey for prior years.

Data obtained will be edited, coded and entered into a computer file. Initial data analyses will generate cross tabulations. These analyses will reveal a number of program characteristics, e.g., how many Demonstration Center Schools significantly upgrade their physical education curricula, the number of contacts with other schools, and growth of interest in programs across states.

In short, initial analysis will determine whether the Demonstration Schools or other schools in the area have upgraded their physical education program and whether there are effective

promotional effects.

From the above analyses, additional review will identify the primary dimensions along which programs differ. Using these factors or dimensions, we will then determine whether there are significantly different outcomes by program type. For example, we will need to test the hypothesis that Demonstrations Schools in states with strong program certification requirements will upgrade their physical education program to a greater extent than Demonstration Schools in other states.

Exhibit VII-3 identifies the items on the survey instruments with respect to the categories of research questions for which they are designed to produce information. Since there is overlap between the types of research questions, the grouping of the items should not be regarded as a mutually exclusive listing.

EXHIBIT VII-3

PRELIMINARY ANALYSIS AGENDA FOR
DEMONSTRATION CENTER SCHOOLS PROGRAM

(a) Program Background and Content

Agency Q 1, 2, 4
School Q 1, 2,3,4,7

(b) Program Effect on Individual Schools and the Community

Agency Q 10
School Q 8,9,10,11,12,15
School Q 2 and 3 X School Q 9,10,11

(c) Methods for Certifying Qualifications

Agency Q 4,5

NOTE: Responses to Agency Q 4 will be compared with the basic PCPFS criteria (shown in School Q9).

(d) Promotion Efforts

Agency Q 3,6,7,8
School Q 5,6,12,13
Agency Q 8 X School Q 12
School Q 12 X School Q 13

(e) Results of Promotional Activities

Agency Q 2,9,10, 6 X 9
School Q 14, 12 X 14

VIII. GOVERNOR'S COUNCILS

Based on the Design Concepts Report, HEW has opted to pursue an examination of the program cluster dealing with state Governor's Councils. Specifically, it was decided to conduct case studies of six states. These case studies would be based on interview and possibly documentary data collected on-site. In reviewing the original design concept, HEW decided that it would be of interest to investigate the circumstances surrounding the termination of Governor's Councils. In all cases, the study would seek to gain a further understanding of the process by which Governor's Councils are established, how they are structured, the nature and scope of their operations and of particular importance across all of these dimensions the role of the PCPFS. Because the type of study envisioned has already been described in the Design Concepts Report, this presentation will focus on the issues of state selection, data collection instruments and plans for analysis and reporting.

STATE SELECTION

The small number of states to be examined dictates that the selection will be made purposively, i.e., based on judgments

concerning the suitability of a particular state in terms of a number of factors. The following have been selected:

- Age - The length of time a Governor's Council has been in existence might be a great determinant of its success in fostering cooperative relationships with other organizations. Also, selecting Councils of varying ages might reveal changes in the PCPFS' approach and involvement over time.

- Funding - The amount of funds available to a Governor's Council would seem to be a prime factor in how active the Council can be in terms of staffing, direct funding for program activities and ability to undertake multiple endeavors.

- Regional Distribution - There is a need to ensure against the possibility that attitudes or capabilities regarding fitness programs vary from one region to another, e.g., sunbelt vs. other states. A regional distribution of states also guards against the possibility that PCPFS' involvement has been concentrated in a particular part of the country, e.g., the home states of PCPFS' staff or nearby states.

To accommodate these factors as criteria, the states which now have Governor's Councils will be organized in a matrix to facilitate further consideration and to ensure that all criteria are accounted for. In some cases there will probably be only one or two states which meet a certain combination of criteria, e.g., an older Governor's Council in the West with funding. Some cells may be empty. The type of matrix we propose to use is shown below. Once the states are arrayed on these dimensions, the actual selection can be made on the basis of additional factors. Such factors might include the amount of existing knowledge about a particular state, organizational or program characteristics which are known to be unique and whether a visit was already made to a particular state earlier in this study.

	OLD		NEW	
	Funded	No Funding	Funded	No Funding
East				
Central				
West				
South				

DATA COLLECTION

The on-site case studies would be conducted by contacting the chairperson or senior staff person of the Governor's Council by telephone to introduce the study and schedule a visit. The person contacted would be asked to identify other key actors in the establishment and operation of the Governor's Council and to set up appointments as appropriate. We expect that some parties will be obvious candidates for interviewing while others will surface in the course of the site visit. Among those we envision interviewing are education and health officials, relevant legislators, governor's office staff, co-sponsors and Council members.

In states where the Governor's Council has been terminated it will be necessary to contact the former chairperson and the most senior former staff person as a primary contact point. Should he or she not be available, we will in turn look for other prominent former Council members and other former staff. Contact with the former staff members will be vital to successful case study analyses.

We will exercise careful judgment based on what our prime contact tells us about how far to press for advance appointments. The rationale is that some parties may not readily agree to an appointment if given advance notice, feeling that because the Governor's Council is no longer active it is not worth the time to discuss it. The same individuals may be responsive if contacted on site for a brief discussion.

INSTRUMENTS

The case study approach recognizes the probable variation among sites regarding the sources of information. Since the object is to explore the processes involved in the genesis and operation of the Governor's Councils, it is not important that particular items be obtained from certain individuals. In fact, one product of the study will be a discovery of who the key actors are. For these reasons, a structured interview guide rather than a questionnaire is appropriate for this investigation. While maximizing the researcher's flexibility to probe, ask some questions of more than one respondent and possibly omit items that prove irrelevant, the interview guides will ensure that all the important issues are covered. A draft of the interview guide is contained in Exhibit VIII-1.

ANALYSIS

The case studies prepared for each state will describe the establishment of a Governor's Council, its operations and the role of the PCPFS in both of these aspects. While it is not anticipated that the interview data will be tabulated in the

EXHIBIT VIII-1

INTERVIEW GUIDE FOR GOVERNOR'S COUNCILS

ESTABLISHMENT OF THE GOVERNOR'S COUNCIL

1. When did this state first establish a Governor's Council?

2. Has the Council operated continuously since that time? If not, describe any interruptions in its existence and their duration.

3. By what official action was the Council created, e.g., executive order or state legislation?

b. Have there been changes in the Council's authorization? If so, when did these changes take place and why?

4. Before the establishment of the Council was there any other group or agency charged with a similar responsibility? If so, name it and specify its mission, organizational placement and composition?

b. Does this organization still operate? If so, what is its relationship to the present Governor's Council? Specify membership, staffing, cooperative endeavors.

5. What was the motivation for establishing the Governor's Council?

6. Who in the state lobbied for creation of a Council or favored its creation? Identify initiators such as health, education or community organizations which may have pushed for establishment.

b. What was the nature and level of involvement of initiators and supporters in the events leading to establishment of a Governor's Council?

7. Who were the key decision makers in the establishment of the Council? Note the possible influence of the Governor, state legislators and high level state bureaucrats.

8. Were there decision makers who were initially opposed to the establishment of the Council? If so, who were they and what was the nature of their opposition?

b. Were there any other groups in the state who resisted the creation of a Council? If so, who were they and what was the nature of their opposition?

9. Were the mission, composition or organizational form of the Council as established different from those initially proposed by those supporting the Council's creation? If so, how?

10. Describe the initial form and composition of the Council.

b. How has it changed to date?

11. To what extent was the PCPFS involved in the events leading to the establishment of the Governor's Council? Describe such involvement on the following dimensions:

- Providing advice to initiators about possible organizational forms, missions and authorizing documents
- Suggesting specific types of program activities
- Visiting the state or otherwise contacting state decision makers to provide information or to lobby for creation of a Council
- Serving as a liaison between state initiators or decision makers and other Governors' Councils or fitness and sports related organizations outside the state
- Promising support for the new Council after its establishment
- Making public its support for the establishment of a Council without having direct contact with decision makers

12. Was the involvement of the PCPFS instrumental in winning the support of state decision makers? Identify changes in the positions of the decision makers before and after involvement by the PCPFS. Specify the decision makers in question.

EXHIBIT VIII-1
(Continued)

13. Was the involvement of the PCPFS instrumental in changing the lobbying tactics of state initiators? Identify changes in the lobbying efforts before and after involvement by the PCPFS.

14. How did initiators become aware of the Governor's Council concept and the role of the PCPFS as a possible source of technical information or lobbying assistance?

15. Did initiators seek or receive any assistance from other Governors' Councils in the process of establishing a Council? If so, identify the other state and specify the assistance involved.

OPERATION OF THE GOVERNOR'S COUNCIL

16. How is the Council staffed? Identify the present number of full time and part time staff. Specify the duties of each one, being sure to differentiate between professional and support positions.

b. How has the Council's staffing changed over time? Note the reasons for expansions and contractions.

17. In what state office or agency are the Governor's Council's staff located?

18. What is the size of the Governor's Council's budget?

FY 1980 $_____
FY 1979 $_____
FY 1978 $_____
FY 1977 $_____
FY 1976 $_____

19. Does the Council's budget cover all staff salaries, office space and equipment and staff travel? For those items not fully covered, identify the sources and amounts of outside funding for these items.

20. What program activities have been sponsored by the Council in the past year? Identify all materials, events, program development and technical assistance activities.

b. For each of these activities did the Council or its staff work with other organizations in the state in terms of funding, staff time, facilities or nominal co-sponsorship? Identify the organization involved and their contributions to the activities.

21. For each cooperative endeavor, how did the working relationship come about? Identify the role of the staff and members of the Council in soliciting the participation of other organizations.

b. Did the Governor's Council seek or receive offers of assistance from the PCPFS in identifying or contacting potential co-sponsors? If so, identify the contacts the PCPFS' role and the outcomes.

22. Has the PCPFS been involved in the implementation of program activities undertaken by the Governor's Council? If so, identify the activities and the role played by the PCPFS in terms of:

- Suggesting events or agendas
- Helping design events, agendas or materials
- Identifying target groups
- Identifying or supplying clinicians, conferees, speakers or other program implementors
- Directly participating in the activities
- Arranging for facilities

23. Describe the process by which the Governor's Council decides to undertake program activities. Identify how ideas are conceived, how outside proposals are considered and how choices are made among alternative courses of action.

24. What is the process by which the Council identifies areas for potential program activity? Identify input from Council members, public agencies or community groups and the use of documentary information which would be indicative of fitness and health needs.

EXHIBIT VIII-1
(Continued)

25. How does the Council determine the success of program activities? Identify mechanisms for obtaining feedback from co-sponsors and program participants and the use of follow-up measures of program impact.

26. What are the Council's expectations for the future regarding the following items (identify anticipated expansions, contractions and new orientations and the reasons behind them)?

- Staff
- Budget
- Organizational Structure
- Number and types of cooperating organizations
- Target audience
- Program activities
- Relationship with the PCPFS

27. (For former Governor's Councils only)
Why was the Council abolished? Identify problems regarding budget, staffing, commitment by other key actors and decision makers.

standard manner of larger scale surveys (presenting frequency distributions, cumulative cross-tabulations and statistical tests) it will be appropriate to trace the relationship between key variables within each state and to construct a cross-state overview, as well as a set of detailed case studies. The overview will serve as a summary of the study, as well as a means of reaching some tentative conclusions about the establishment and operation of the Governors' Councils, their strengths and weakness and the role of the PCPFS in providing guidance. As noted in the Design Concepts Report, the conclusions must be considered tentative because of their lack of inferential power when considering the problems and prospects of other states. Nevertheless, the analysis and documentation provided by the study should offer detailed information and insights not previously available.

EXHIBIT VIII-2

SAMPLE ANALYSIS AGENDA

Who were the key participants at the state level in the establishment of the Governor's Councils and what roles did they play?

Q 5, 6, 7, 8, 9, 14

What was the official basis for the establishment of the Governor's Council?

Q 3

What are the descriptive characteristics of the Governor's Council?

Q 1, 2, 10, 17

What resources does the Governor's Council have?

Q 16, 18, 19

To what extent has the Governor's Council been successful in establishing cooperative relationships with other organizations?

Q 20b, 21

To what extent was the establishment of the Governor's Council affected by actors outside the state?

Q 11, 12, 13, 15

What was the relationship between the climate within the state for establishing the Governor's Council and the involvement of outside actors?

Q 5x11, Q 6x11, Q 7x11, Q 8x11
Q 5x15, Q 6x15, Q 7x15, Q 8x15

What were the effects of involvement by outside actors in the creation of the Governor's Council?

Q 12, 13, 10

EXHIBIT VIII-2
(Continued)

How has the success of the Governor's Council in establishing cooperative relationships with other organizations been influenced by the PCPFS?

Q 21b

What is the relationship between the Governor's Council's resources and the establishment of cooperative relationships?

Q 16x20b
Q 18x20b
Q 19x20b

What is the relationship between the Governor's Council's resources and its sponsorship of program activities?

Q 16x20, Q 18x20, Q 19x20

What is the relationship between the Governor's Council's resources and involvement by the PCPFS in the implementation of program activities?

Q 16x22, Q 18x22, Q 19x22

What is the relationship between the success of the Governor's Council in establishing cooperative relationships and the involvement of the PCPFS in the implementation of program activities?

Q 20bx22

What is the relationship between the establishment of cooperative relationships and the involvement of the PCPFS in identifying or contacting potential co-sponsors?

Q 20bx21b

What is the relationship between the involvement of the PCPFS in the establishment of the Governor's Council and its eventual termination?

Q 27x11, 12, 13

What is the relationship between the initial form and composition of the Governor's Council and the involvement of the PCPFS in its establishment?

Q 17x27

EXHIBIT VIII-2
(Continued)

How is the continuance or termination of the Governor's Council related to its level of activity in sponsoring program activities and its success in establishing cooperative endeavors?

Q 27x20, 20b

What is the relationship between the Governor's Council's planning process and its sponsorship of program activities?

Q 23x20, 20b
Q 24x20, 20b

What is the relationship between the success of the Governor's Councils in sponsoring program activities and establishing cooperative relationships and subsequent expansions or contractions in available resources?

Q 20, 20bx16b, 18